

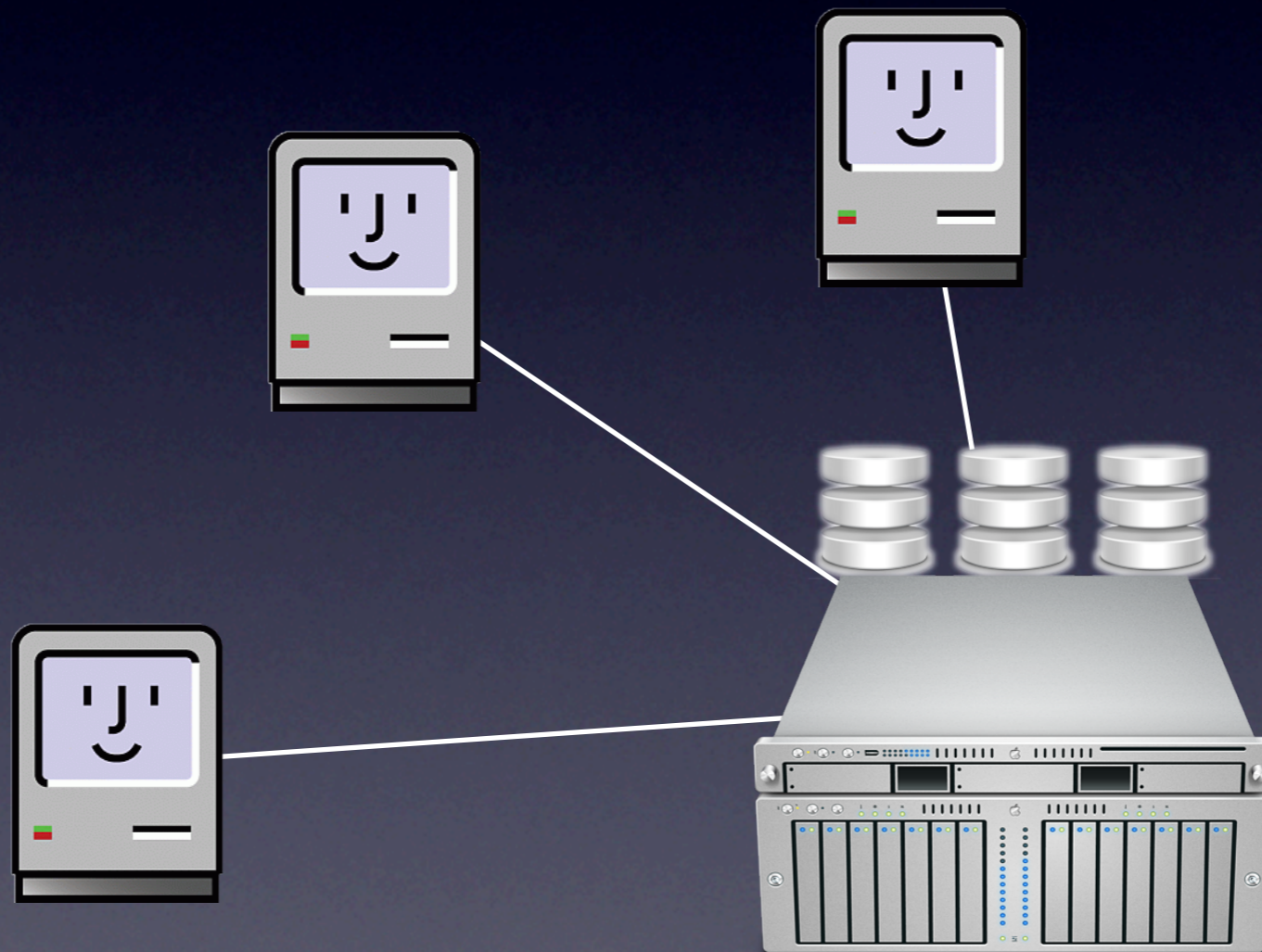


# Progress Report Meeting

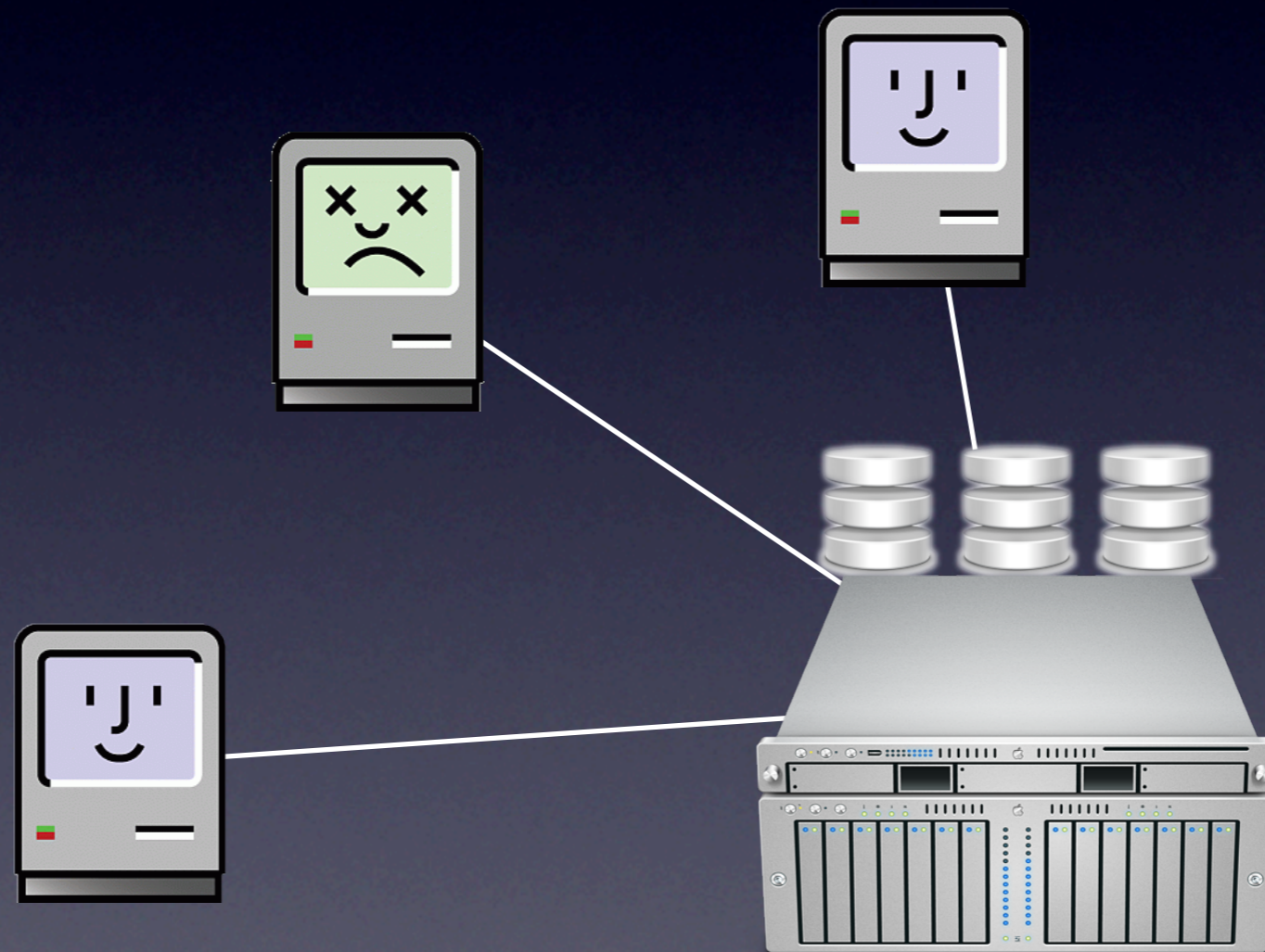
Multi-level Multi-core Distributed Traces  
Synchronization

Benjamin Poirier

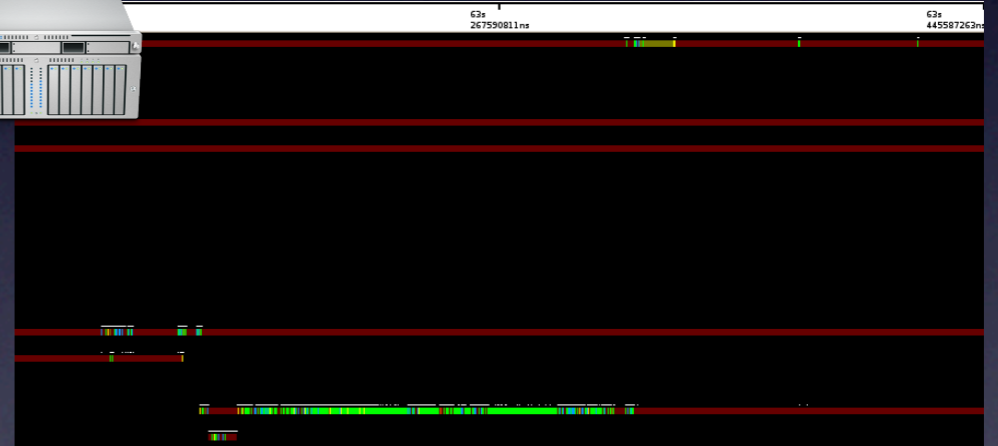
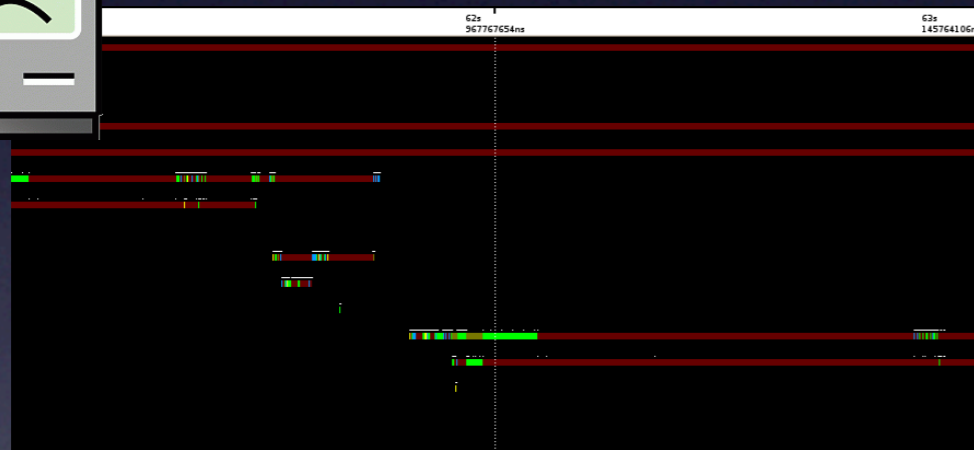
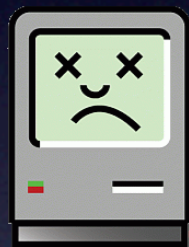
# What is Distributed Tracing?



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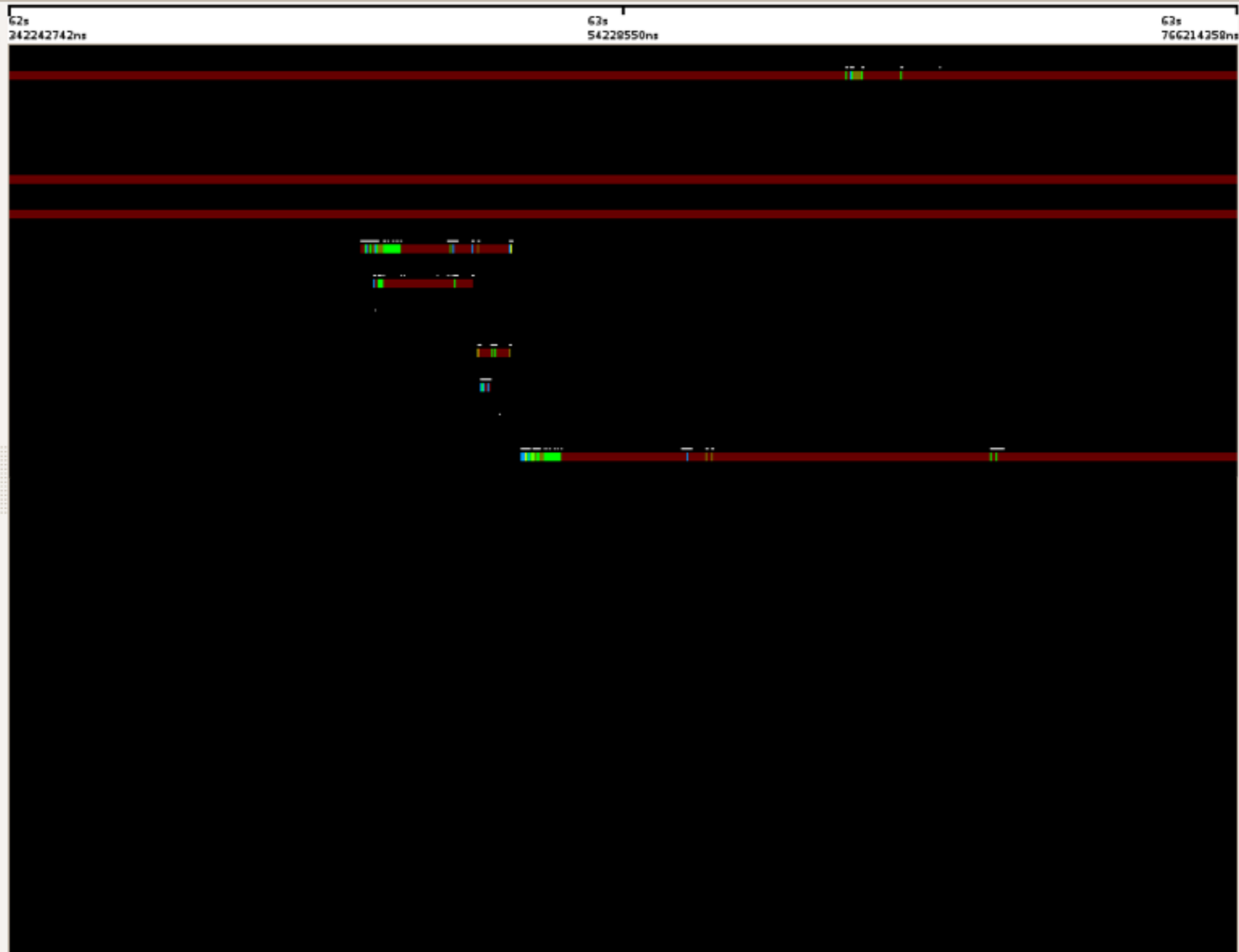
# How to do distributed tracing?



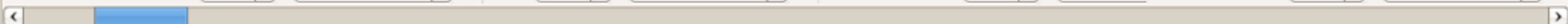


Traceset

- ? Process
- python2.5
- sshd
- ltdctl
- ltd
- ltd
- /usr/sbin/sshd
- /usr/sbin/sshd
- udev
- /bin/mktemp
- /usr/bin/X11/xauth
- udev
- /usr/sbin/sshd
- /usr/sbin/sshd
- udev
- /usr/bin/python2.5
- /usr/bin/X11/xauth
- udev
- /usr/local/bin/mpdroot
- python2.5
- /tmp/mpibench-1.2/mpibench
- /usr/sbin/sshd
- /usr/sbin/sshd
- udev
- /usr/local/bin/ltdctl
- /usr/bin/X11/xauth
- udev



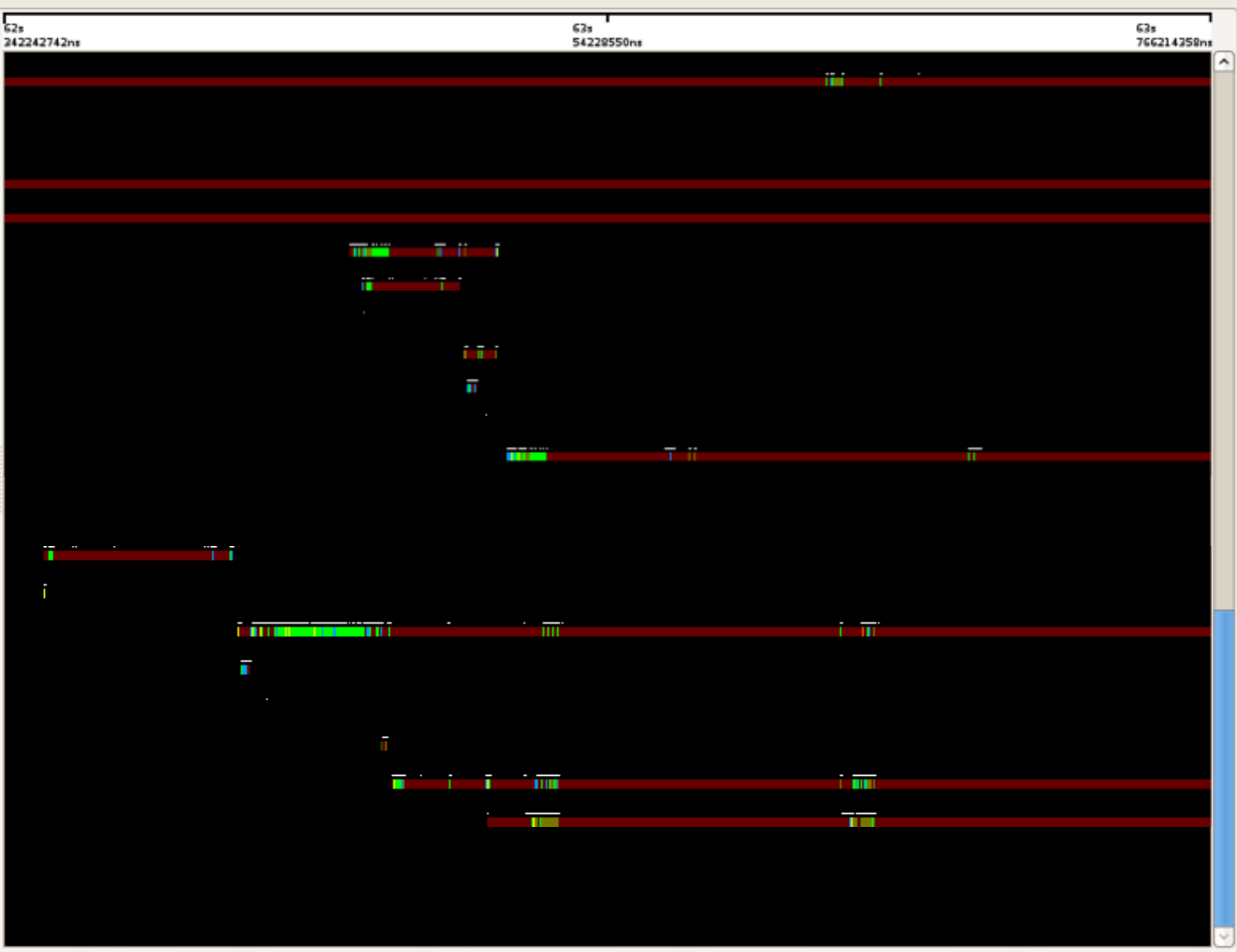
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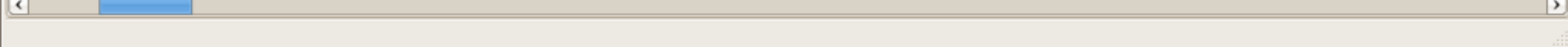


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- /usr/sbin/sshd
- /usr/sbin/sshd
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- /usr/local/bin/ltdctl
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- udev



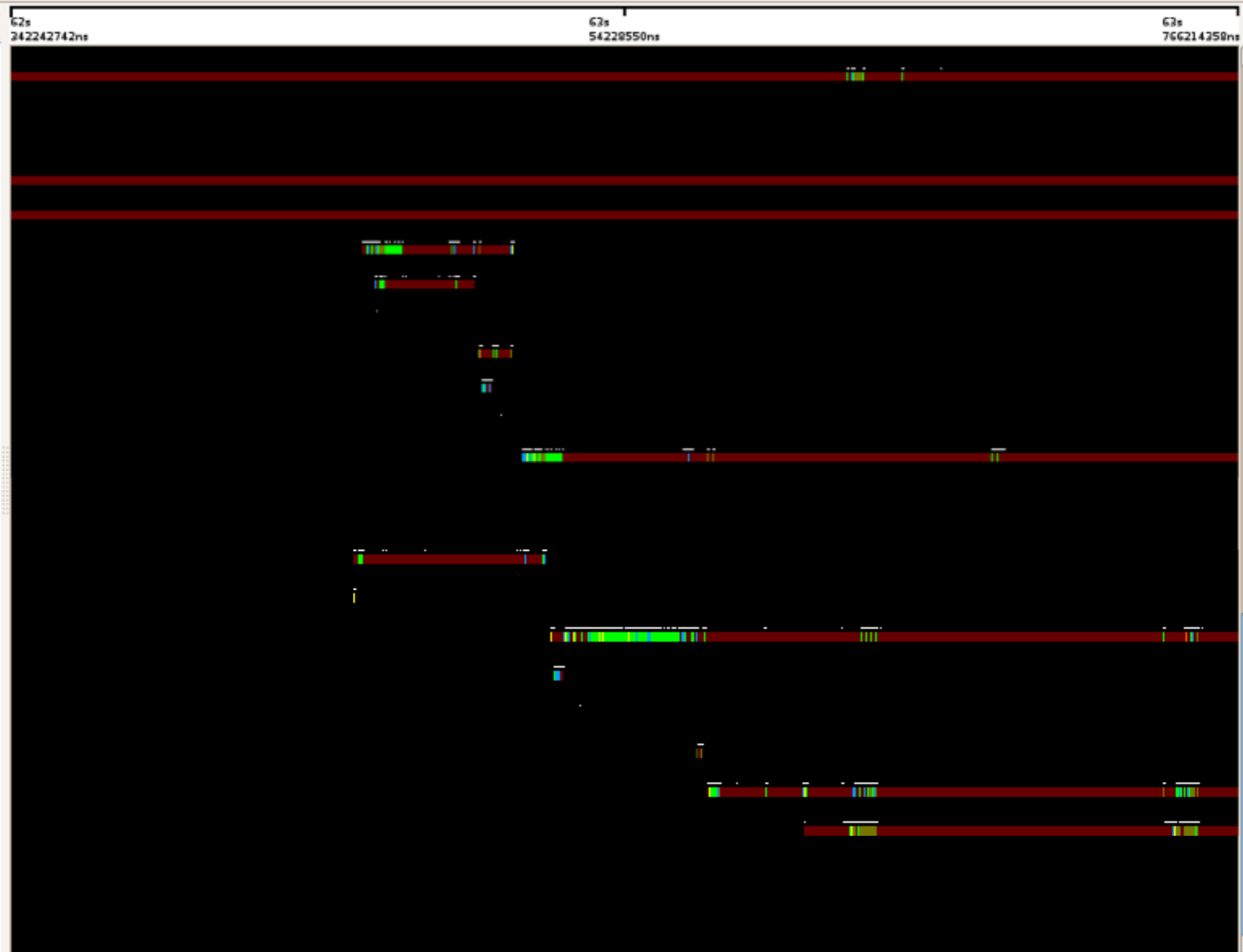
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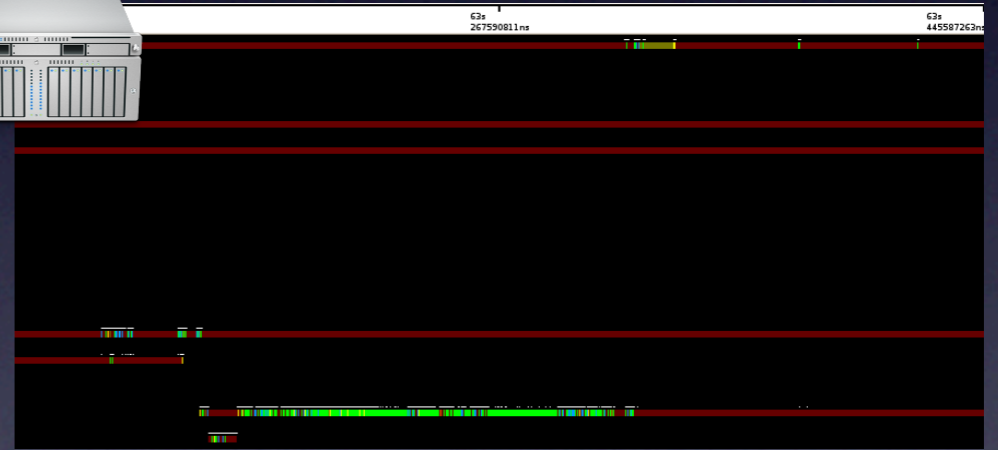
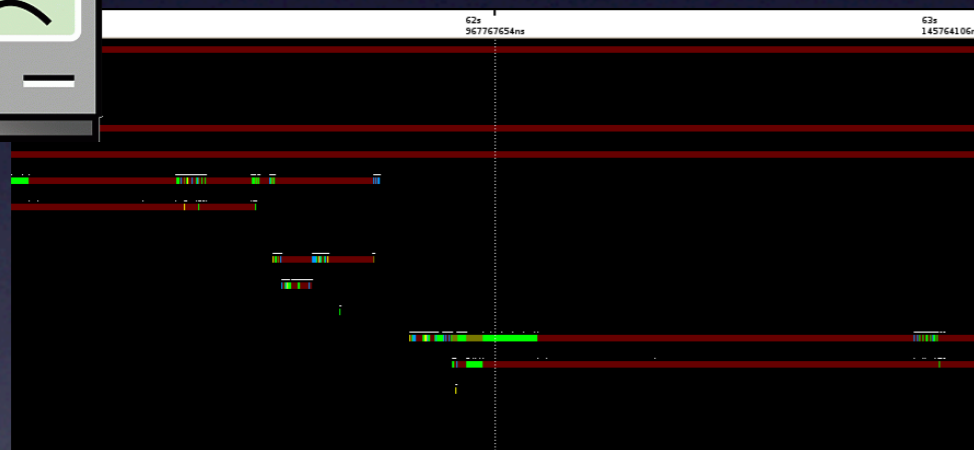
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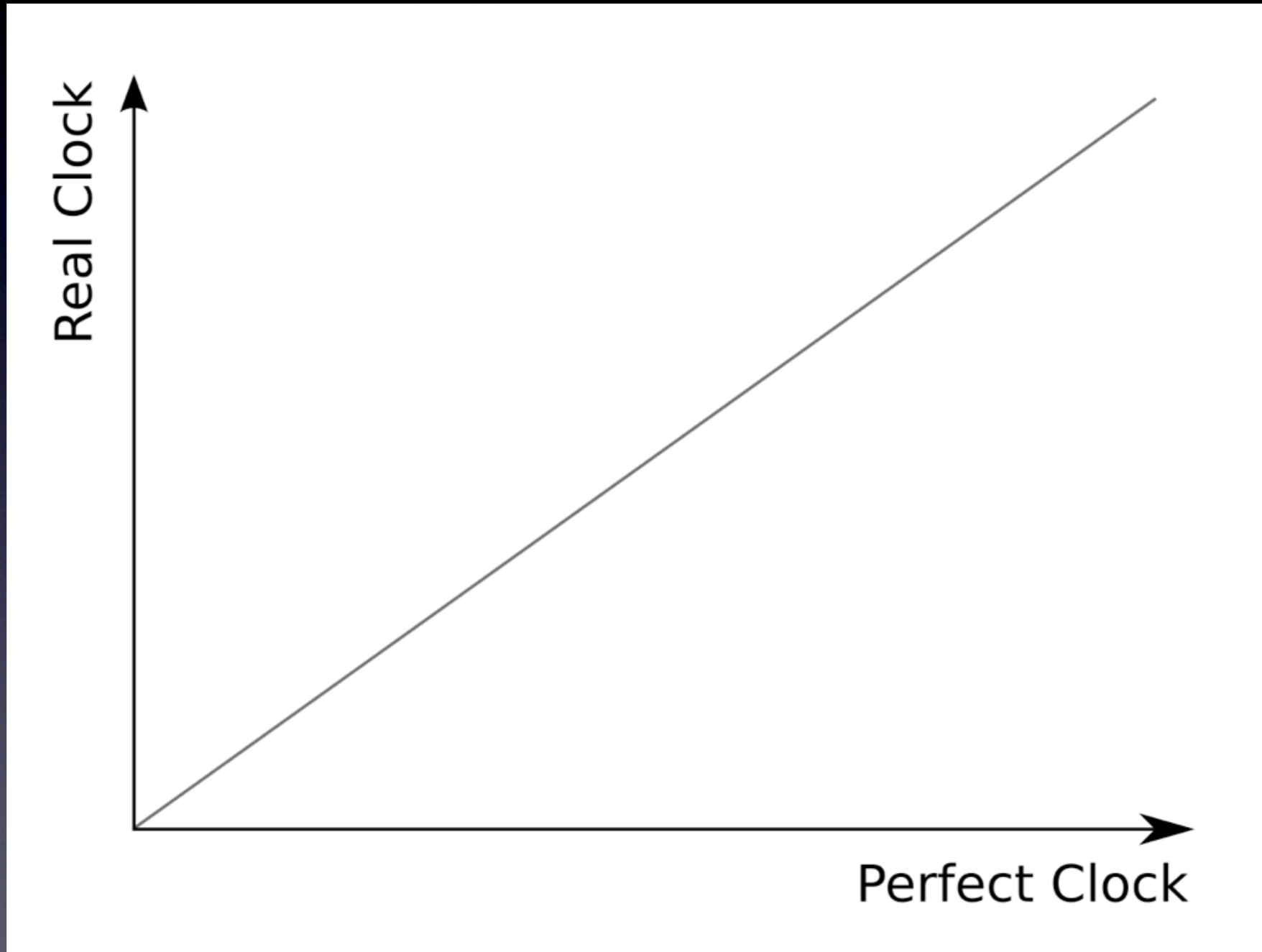
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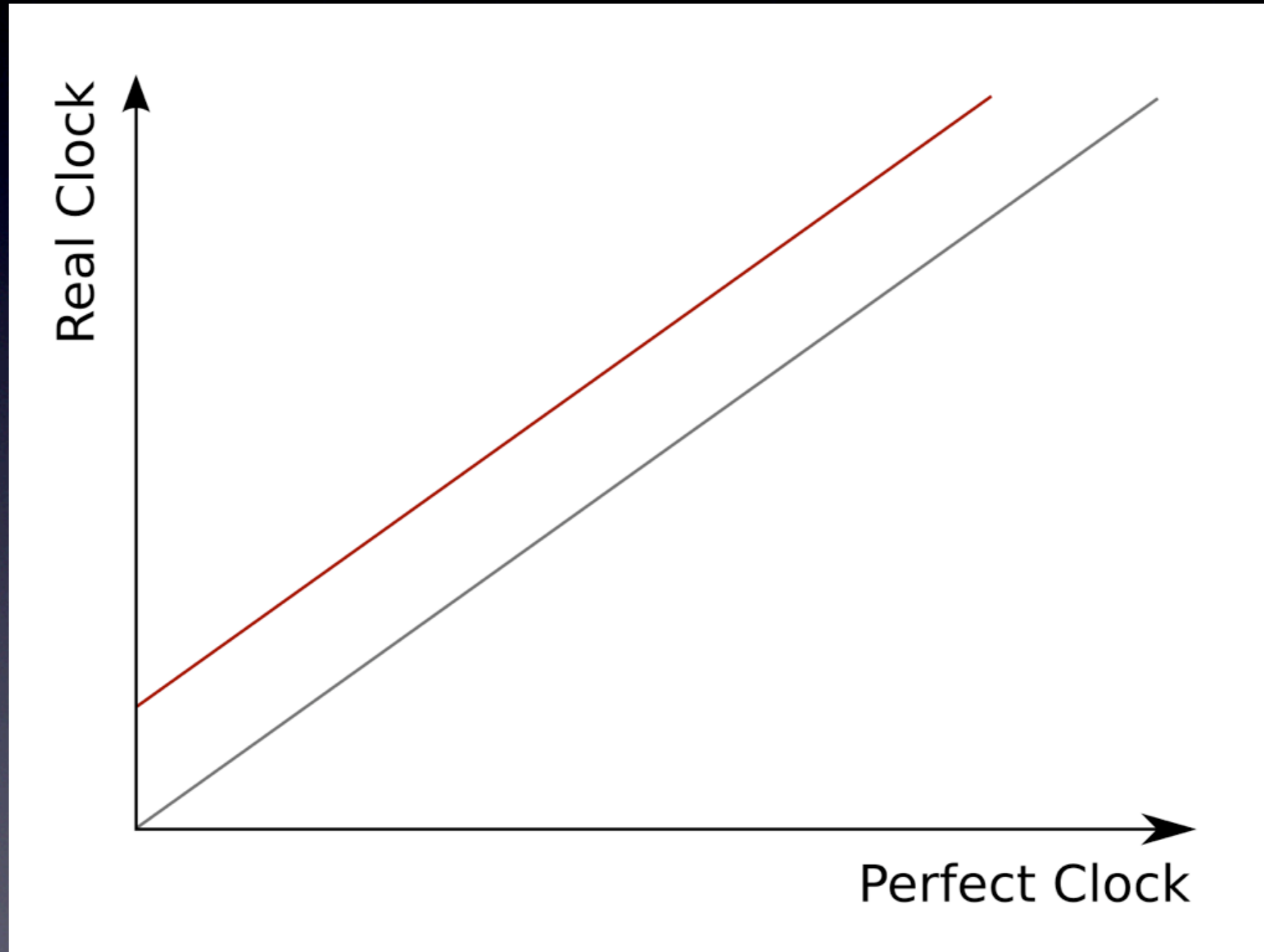




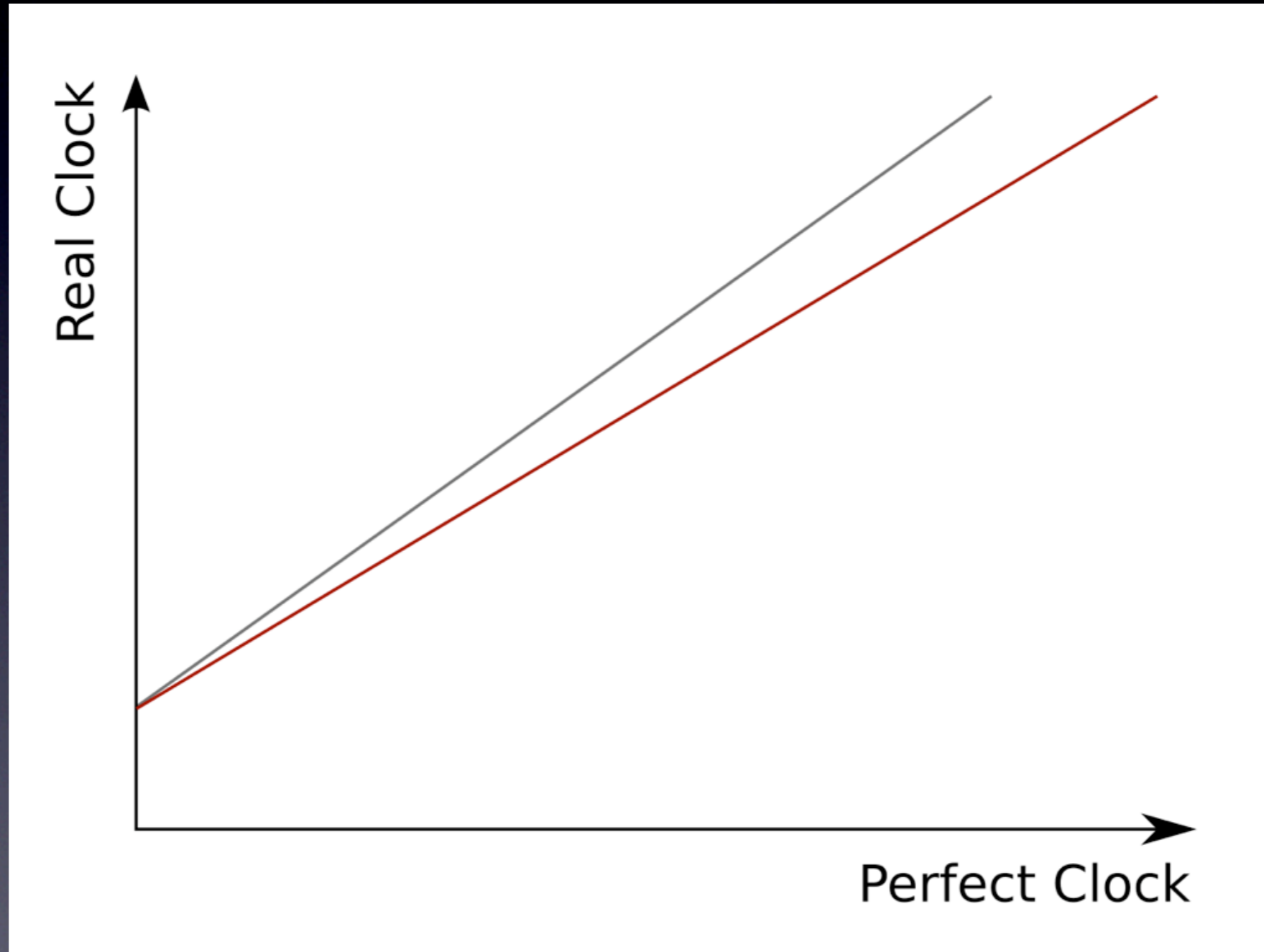
# Clock parameters



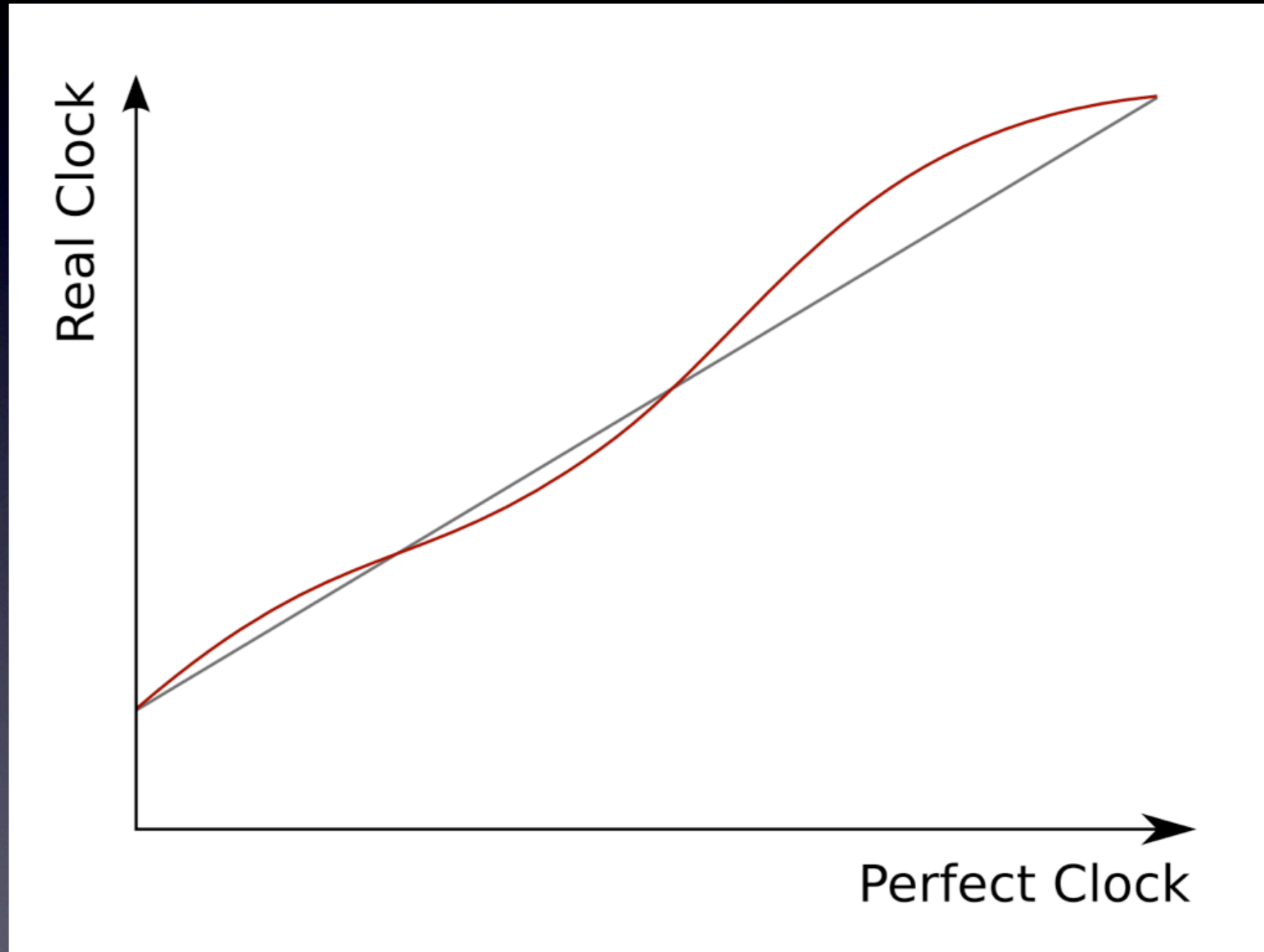
# Clock parameters



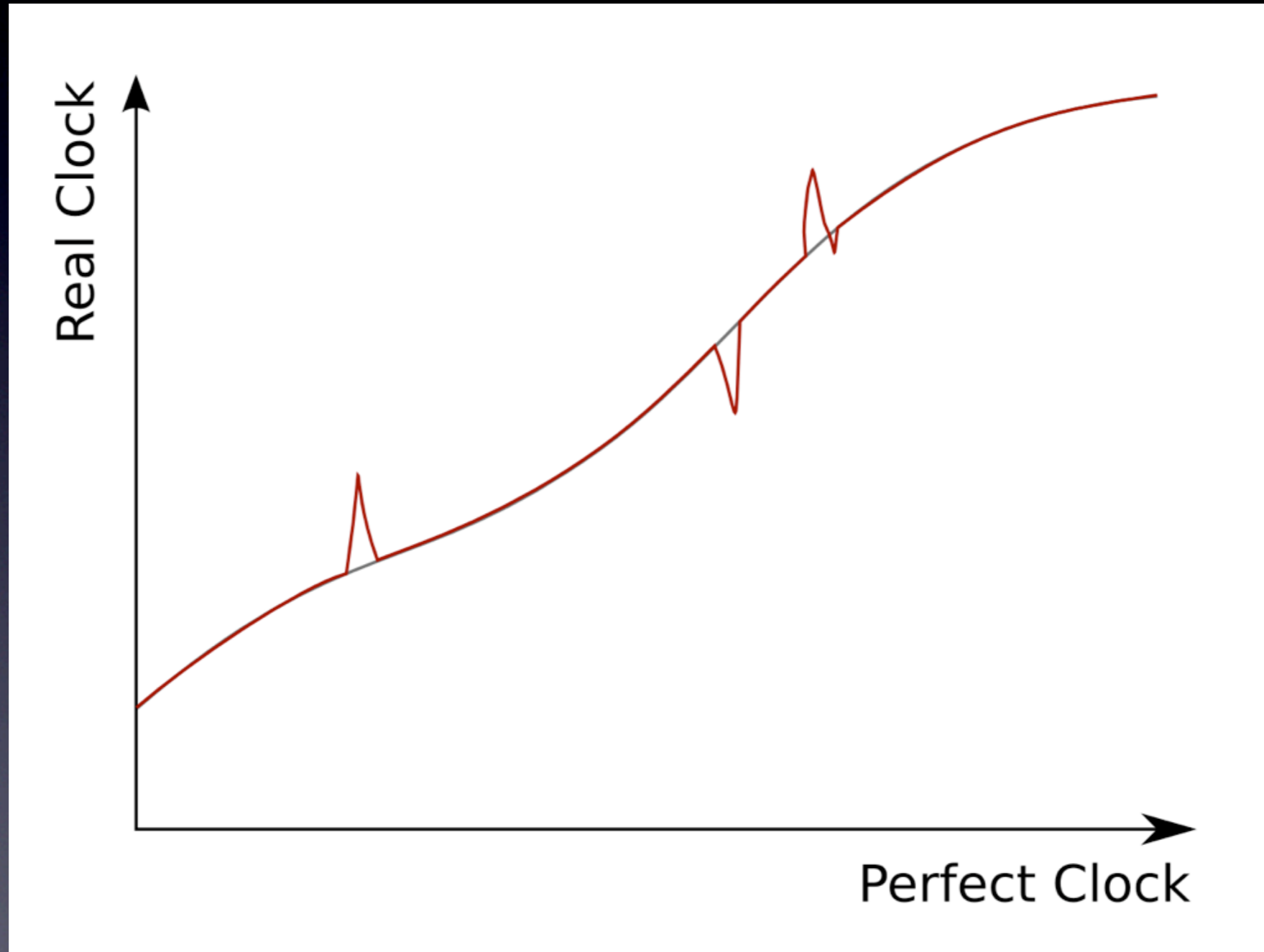
# Clock parameters



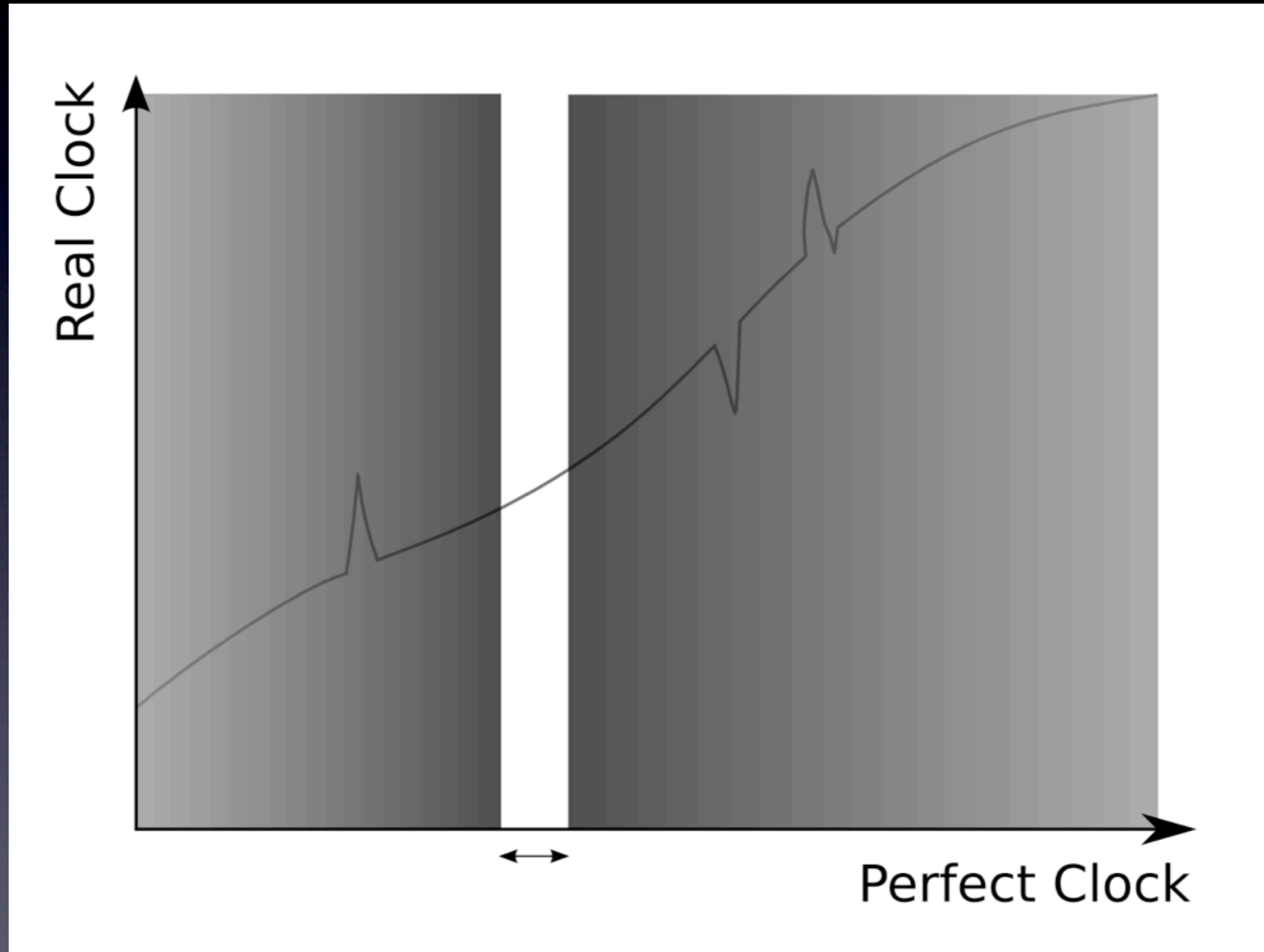
# Clock parameters



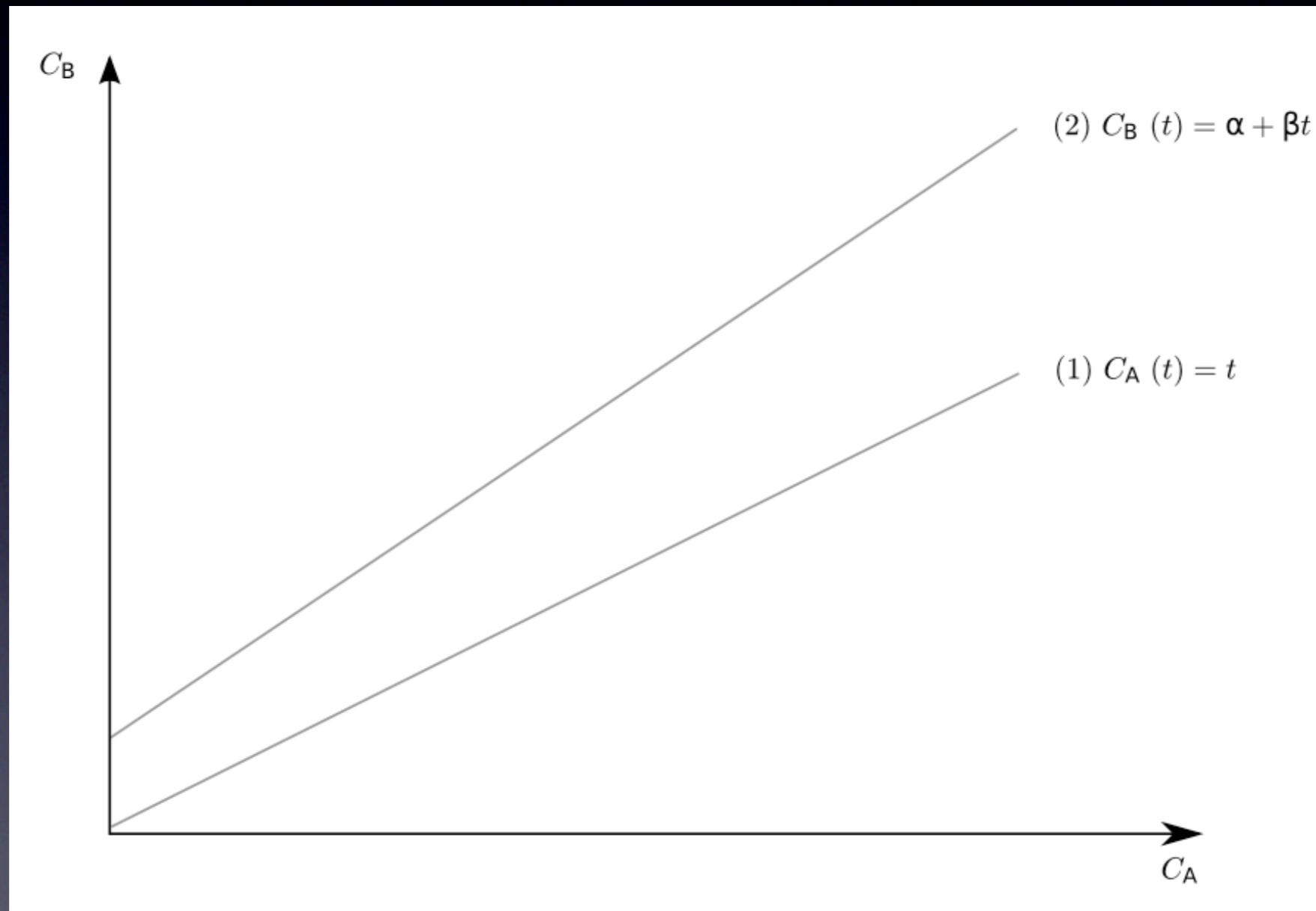
# Clock parameters



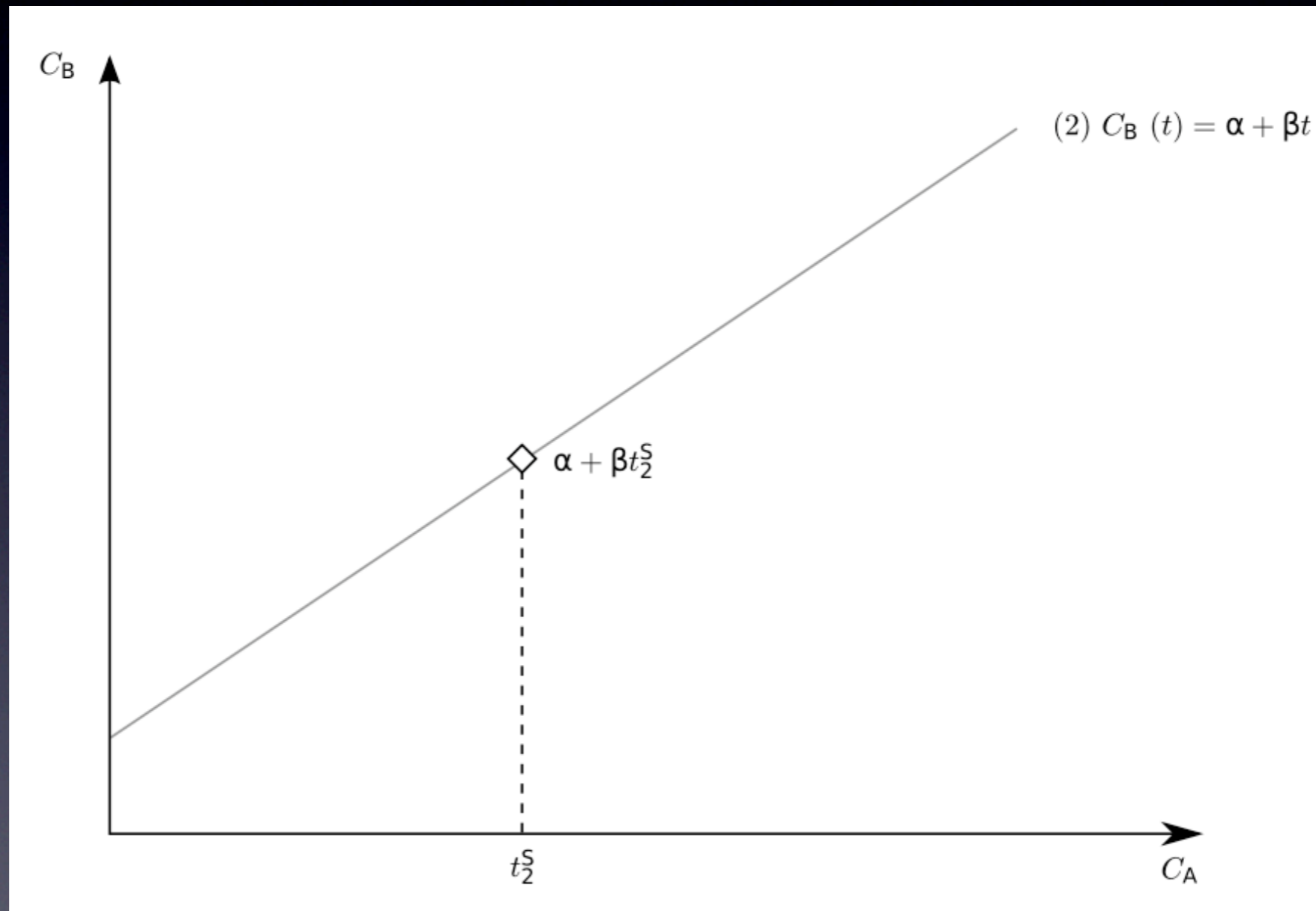
# Clock parameters



# Packet ordering

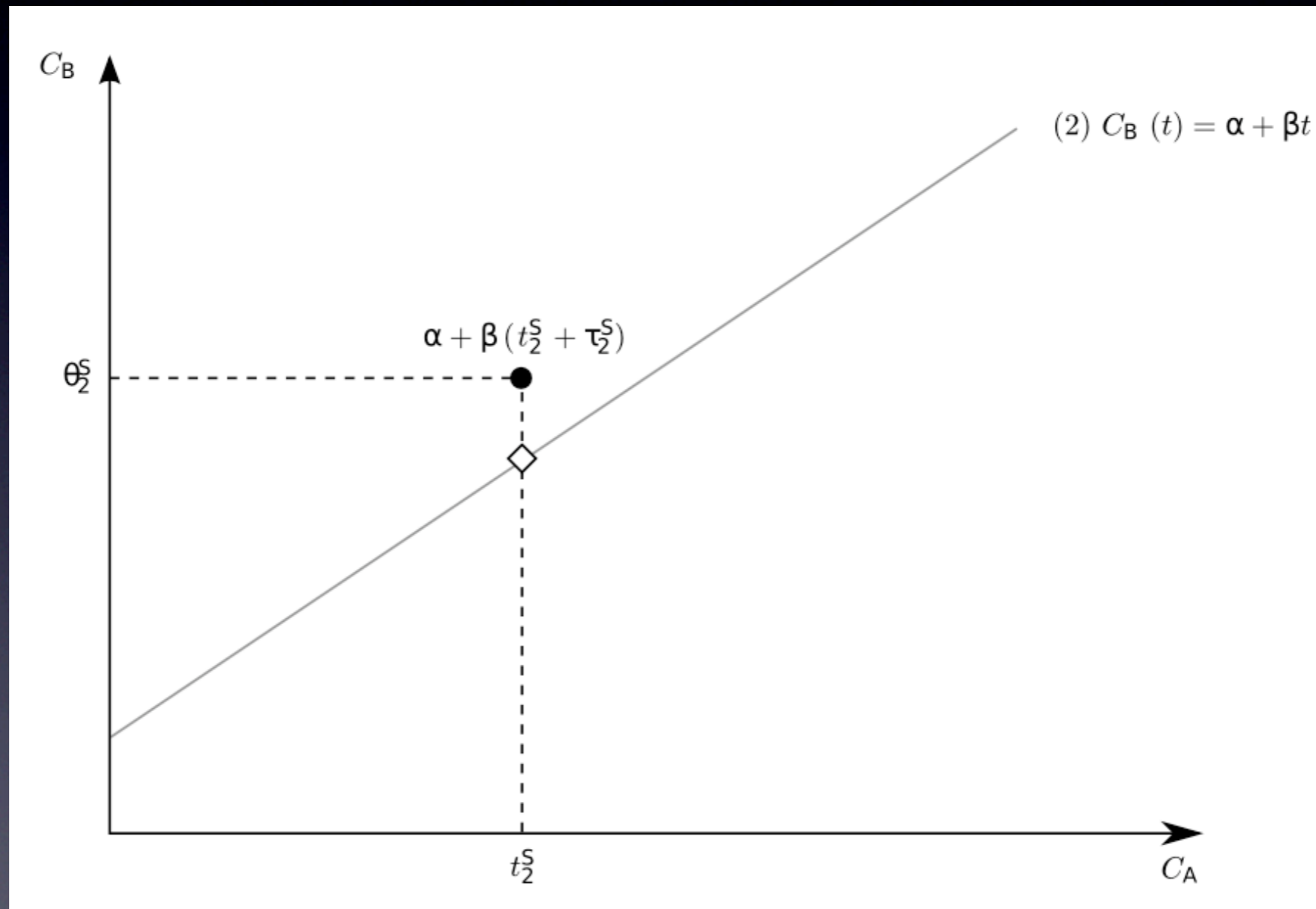


# Packet ordering

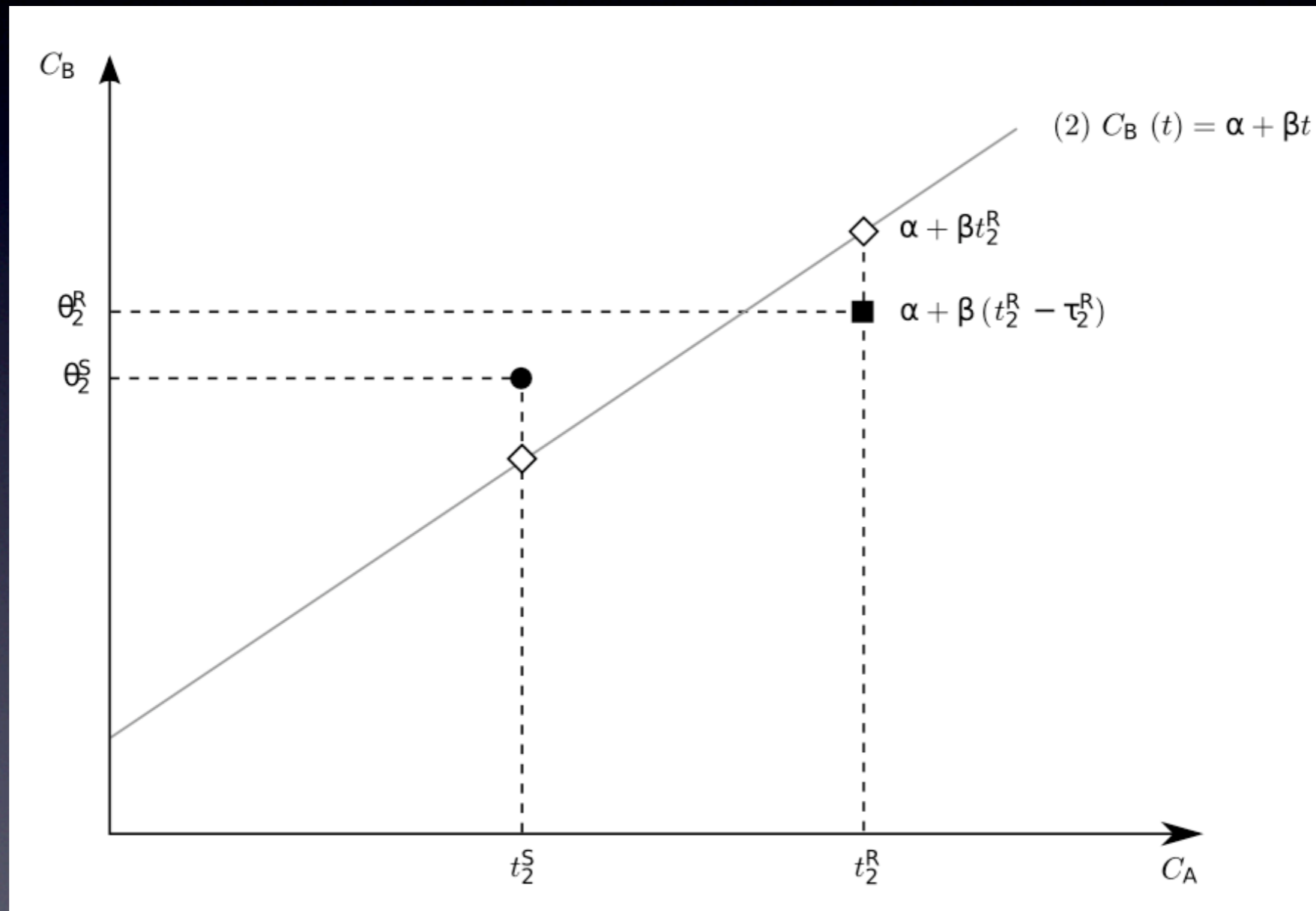




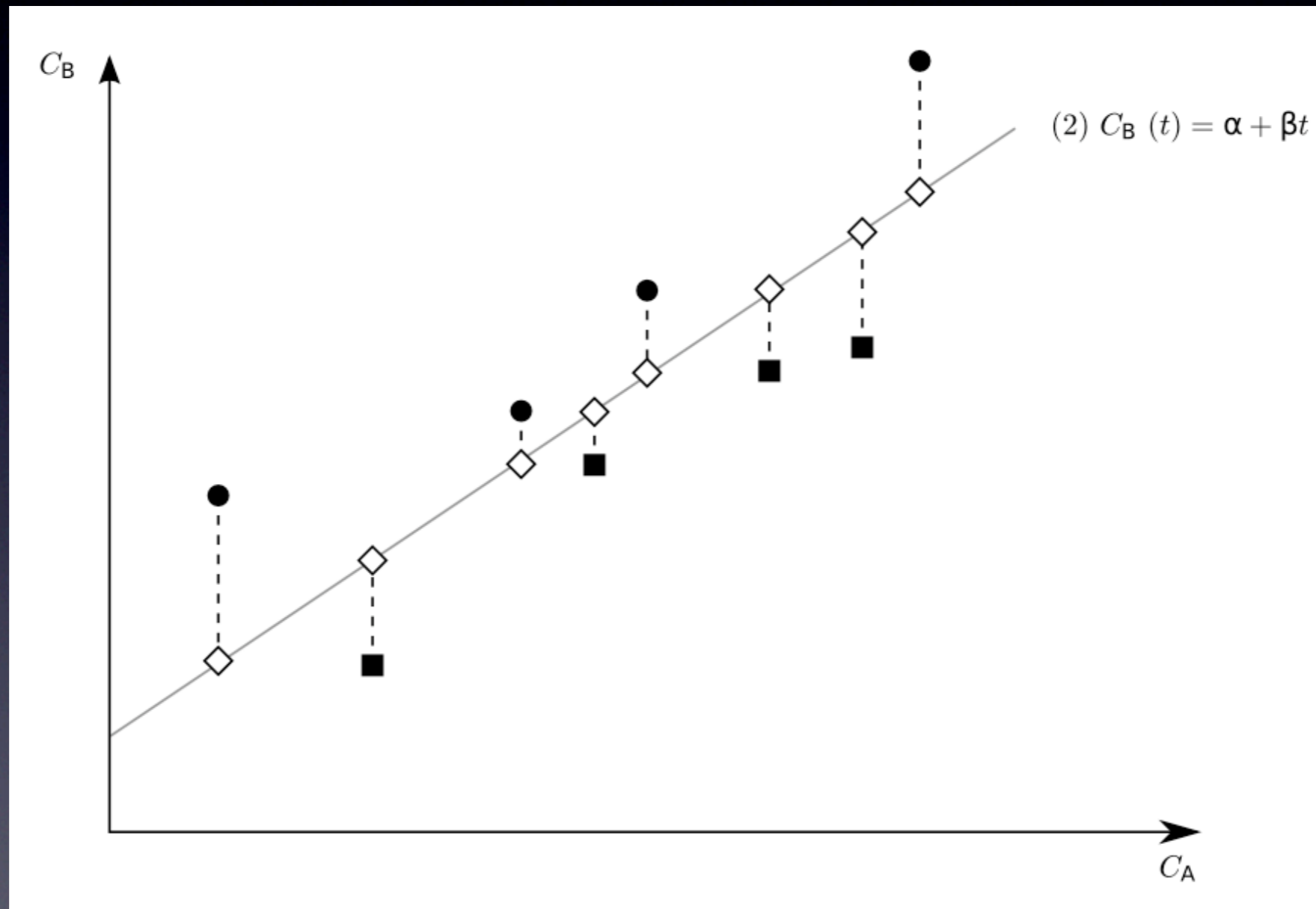
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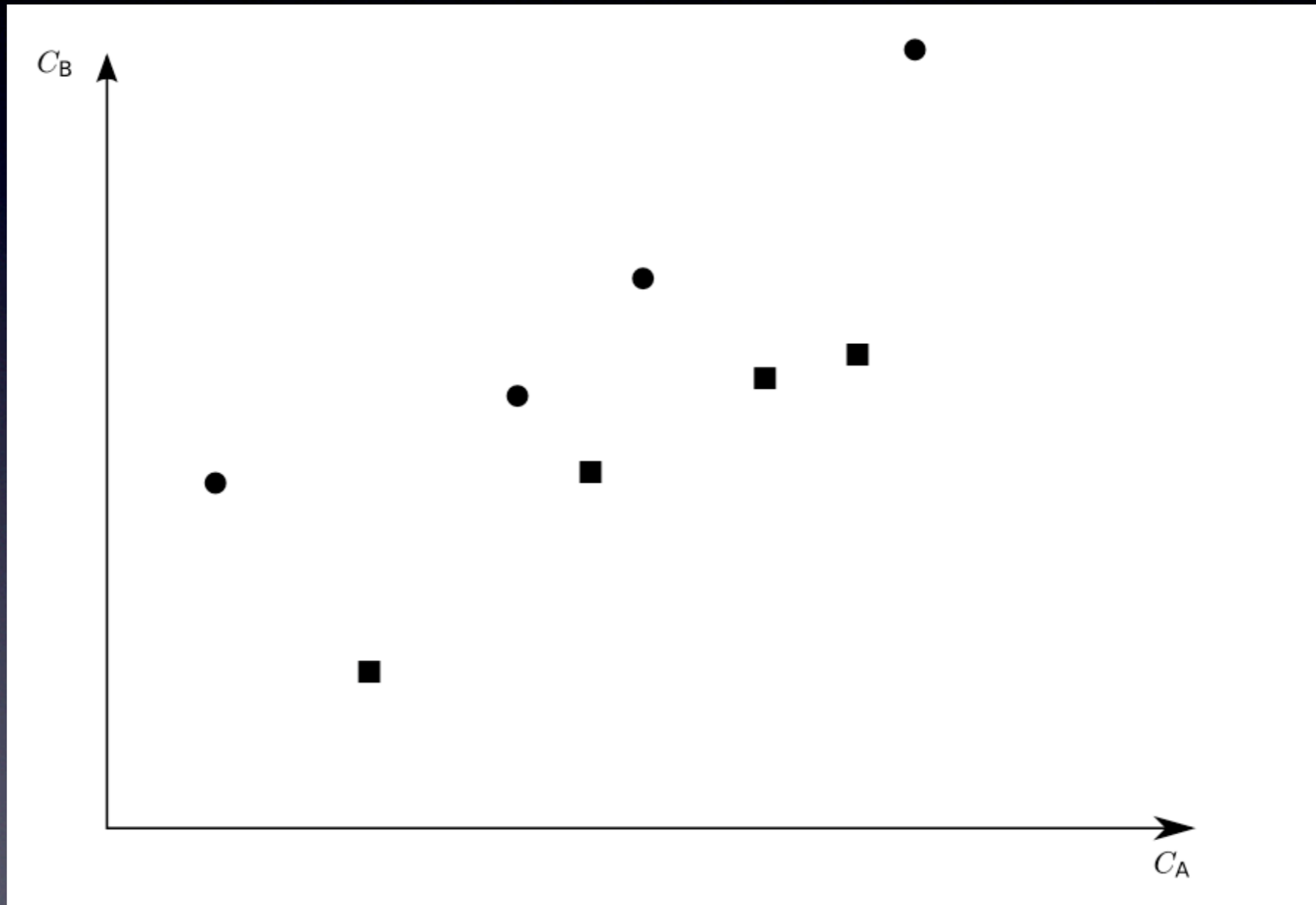
# Packet ordering



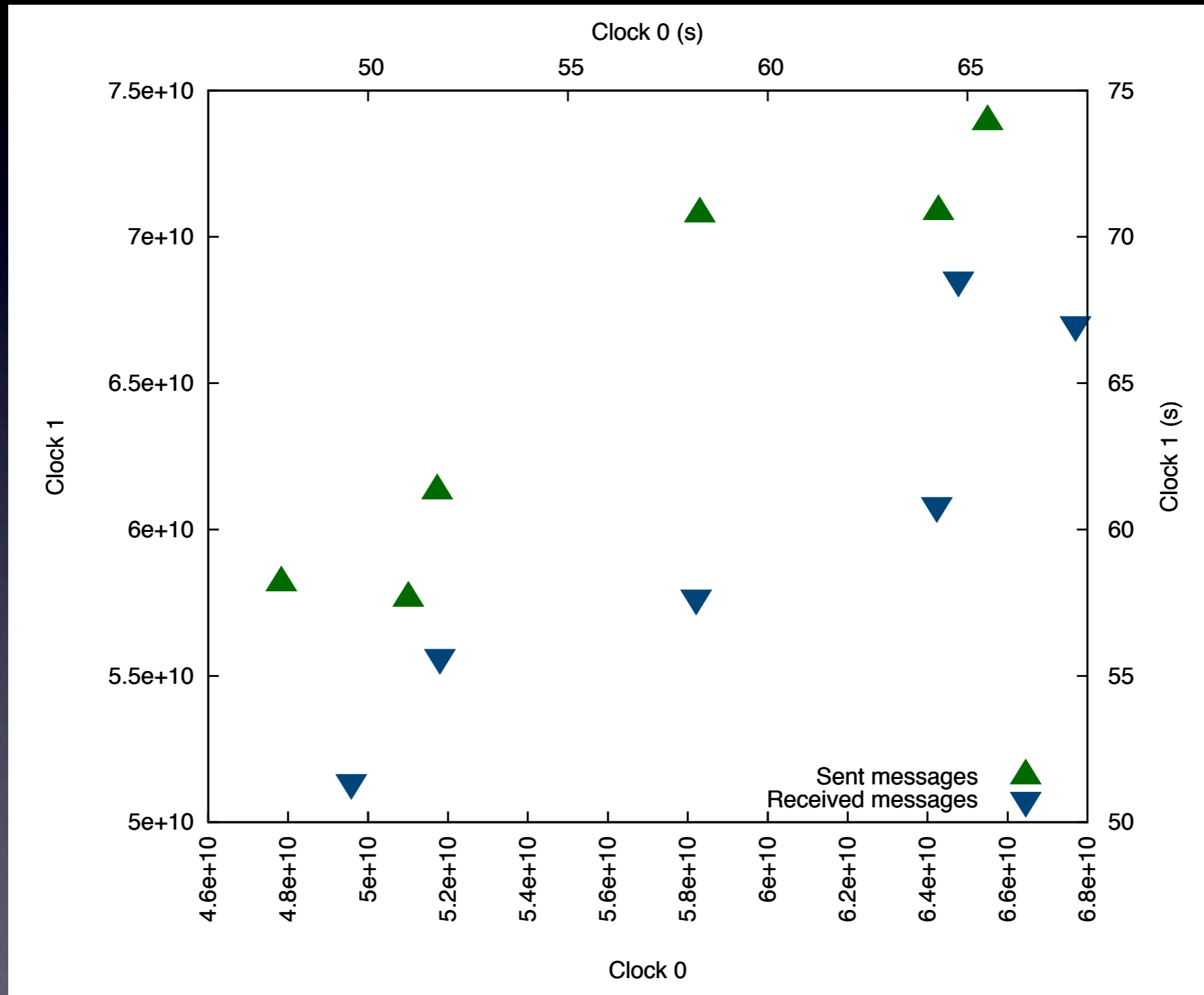
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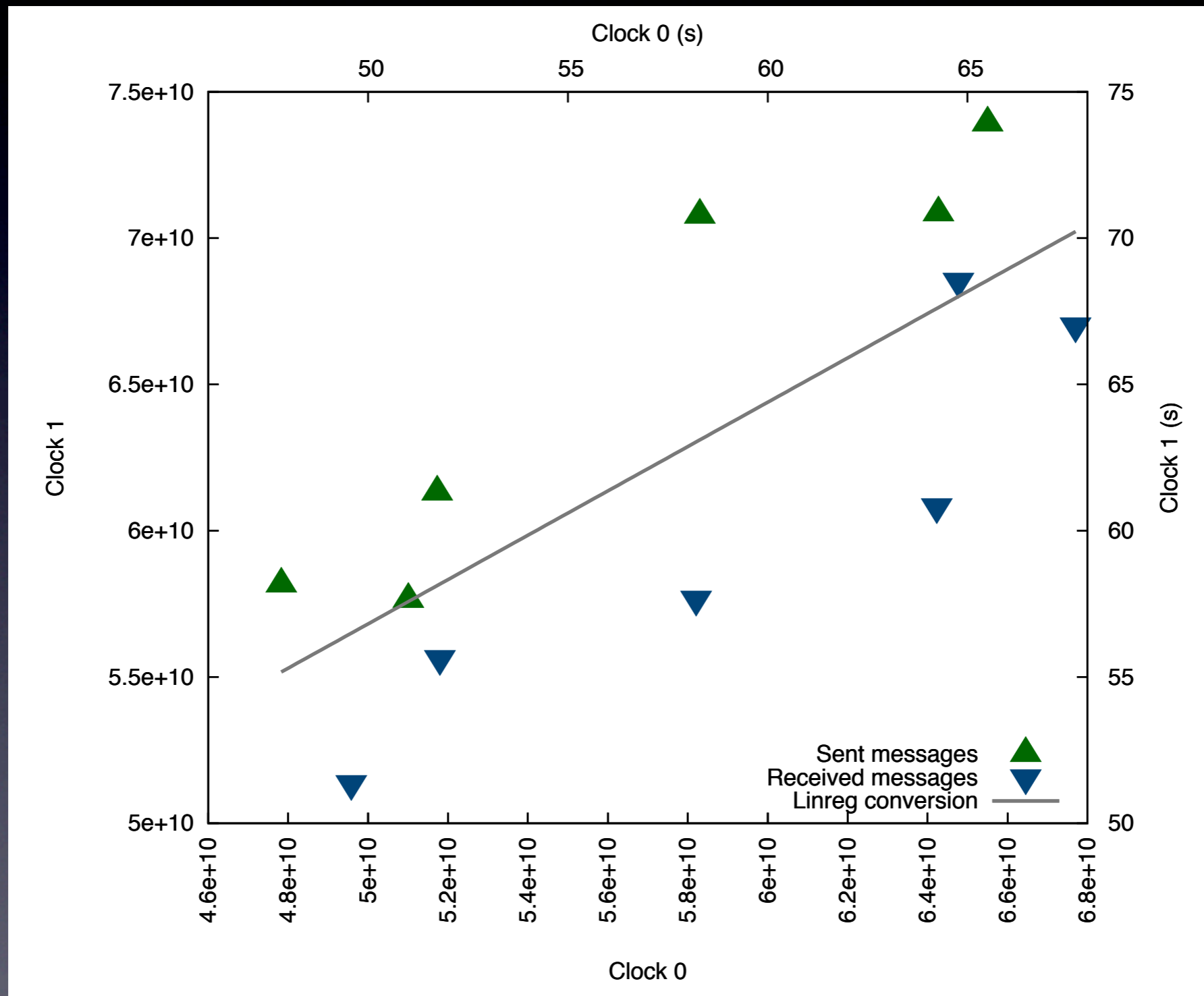
# Packet ordering



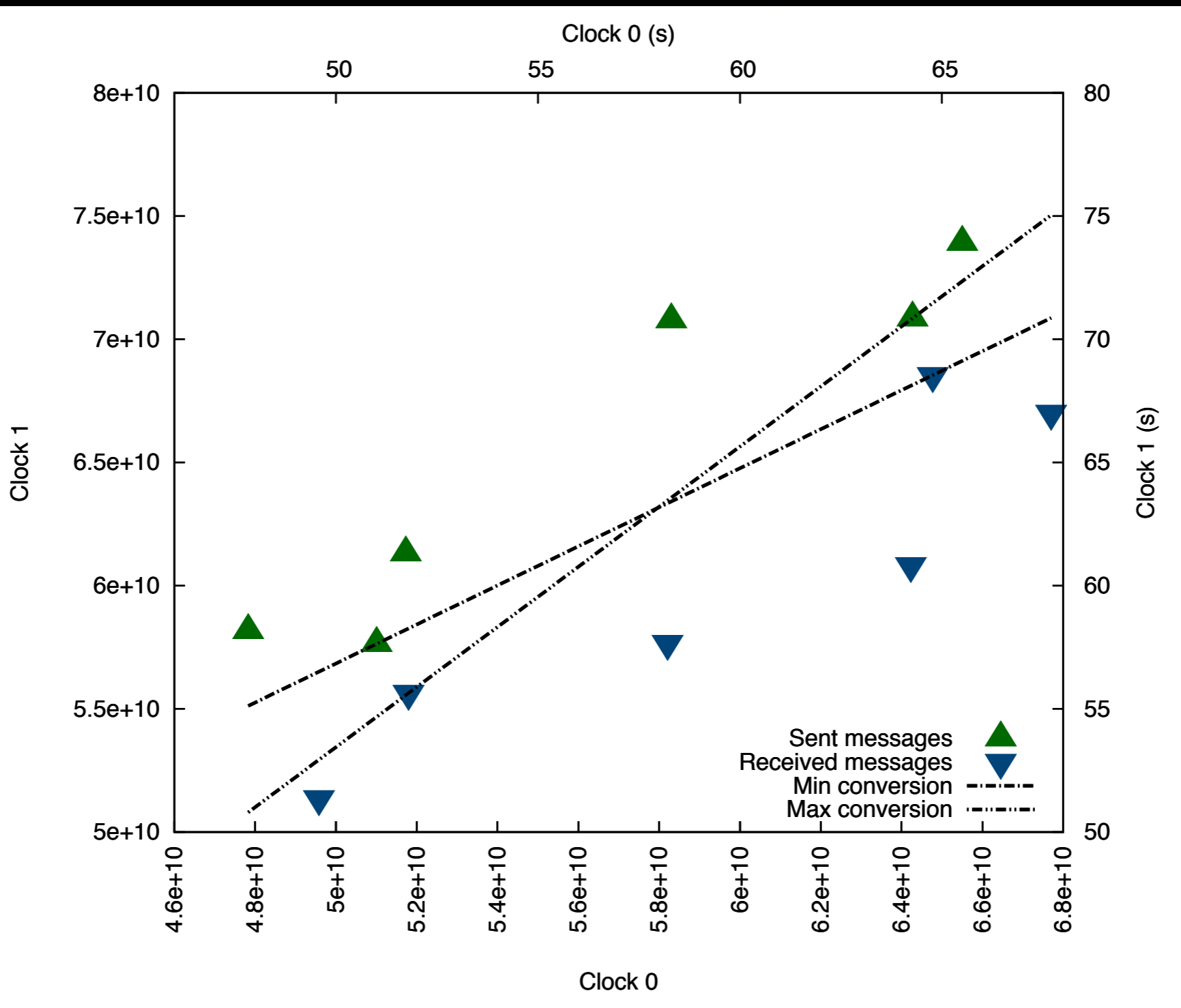
# Correction factors



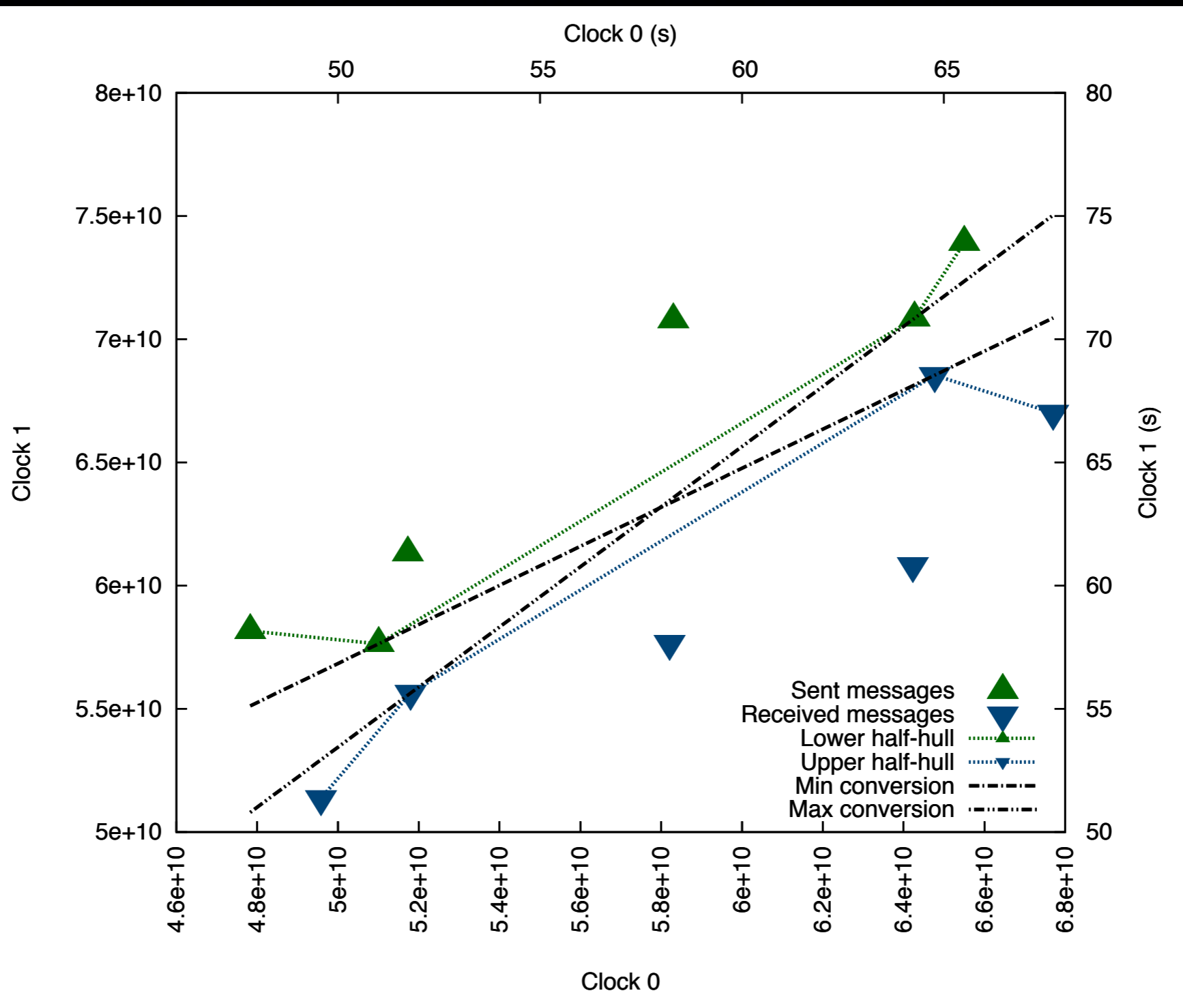
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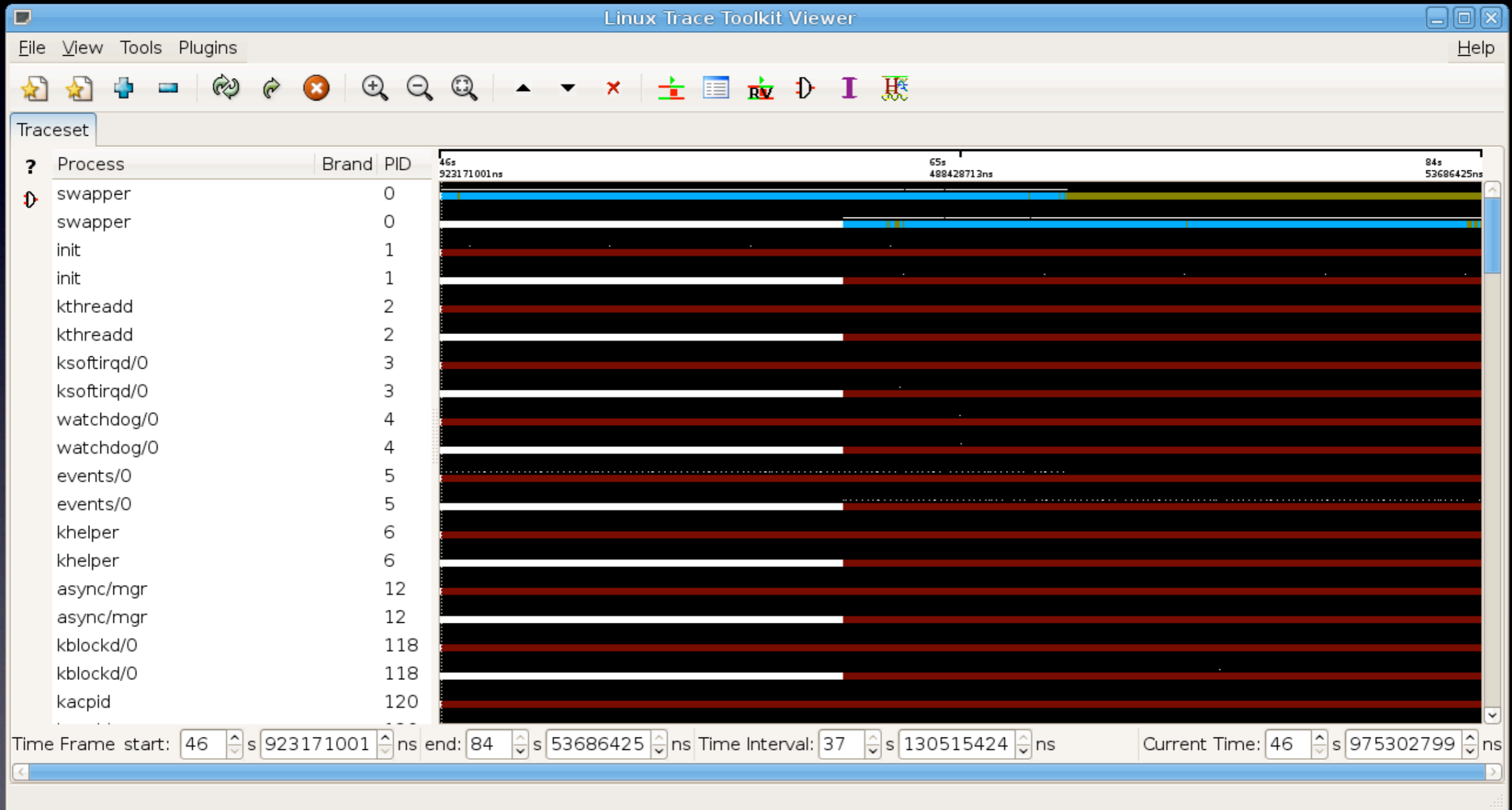


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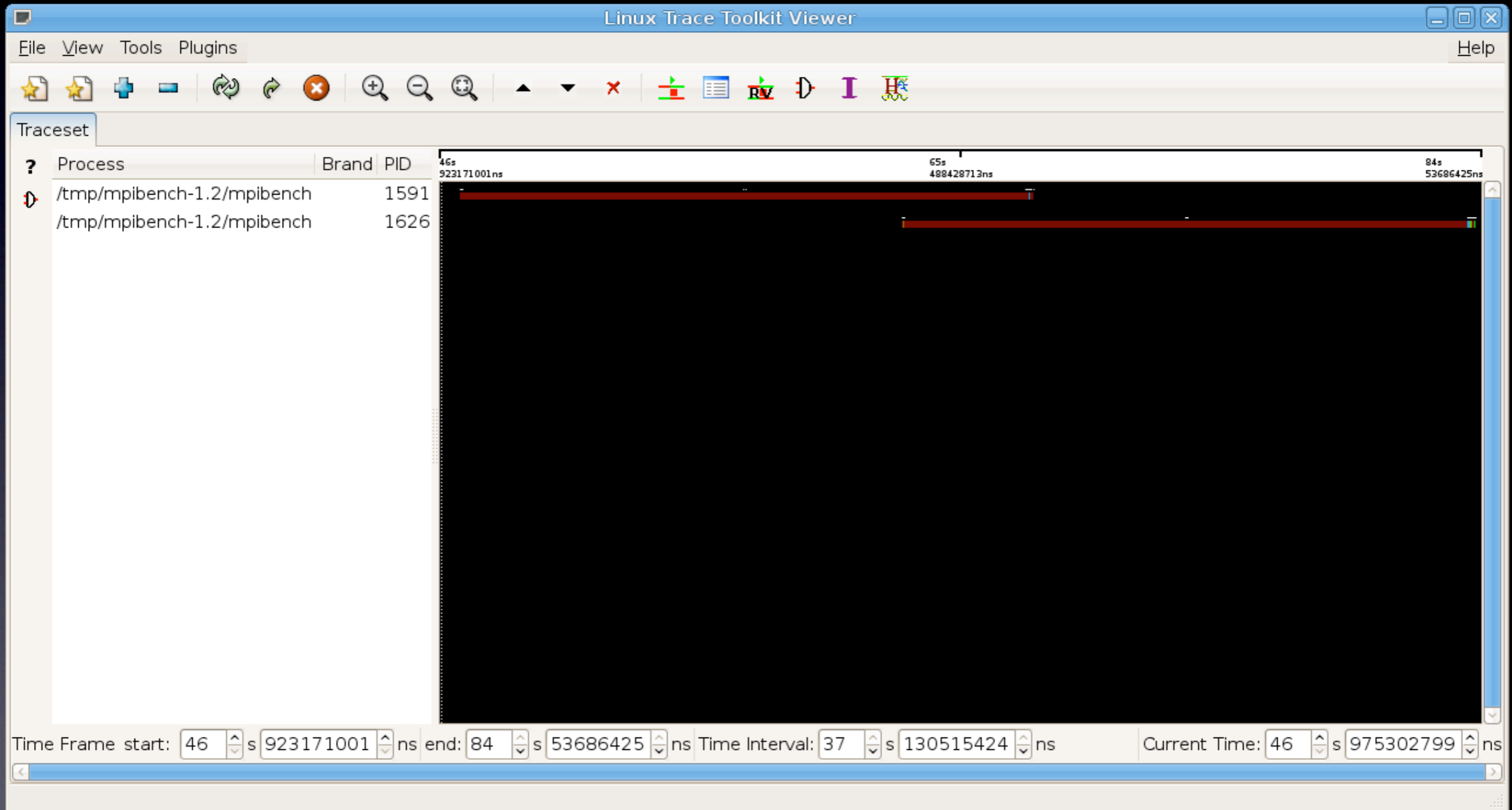




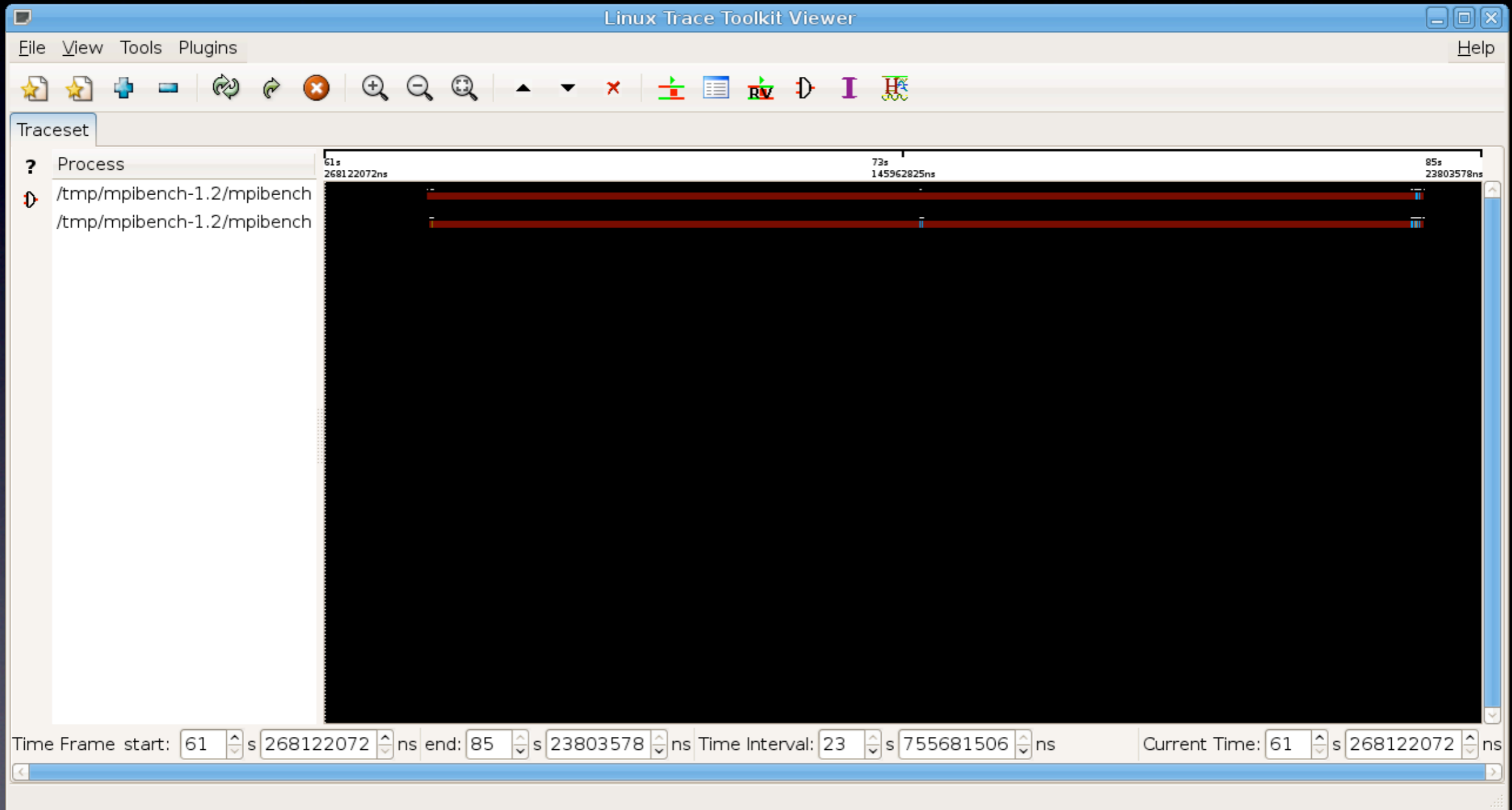
# Results



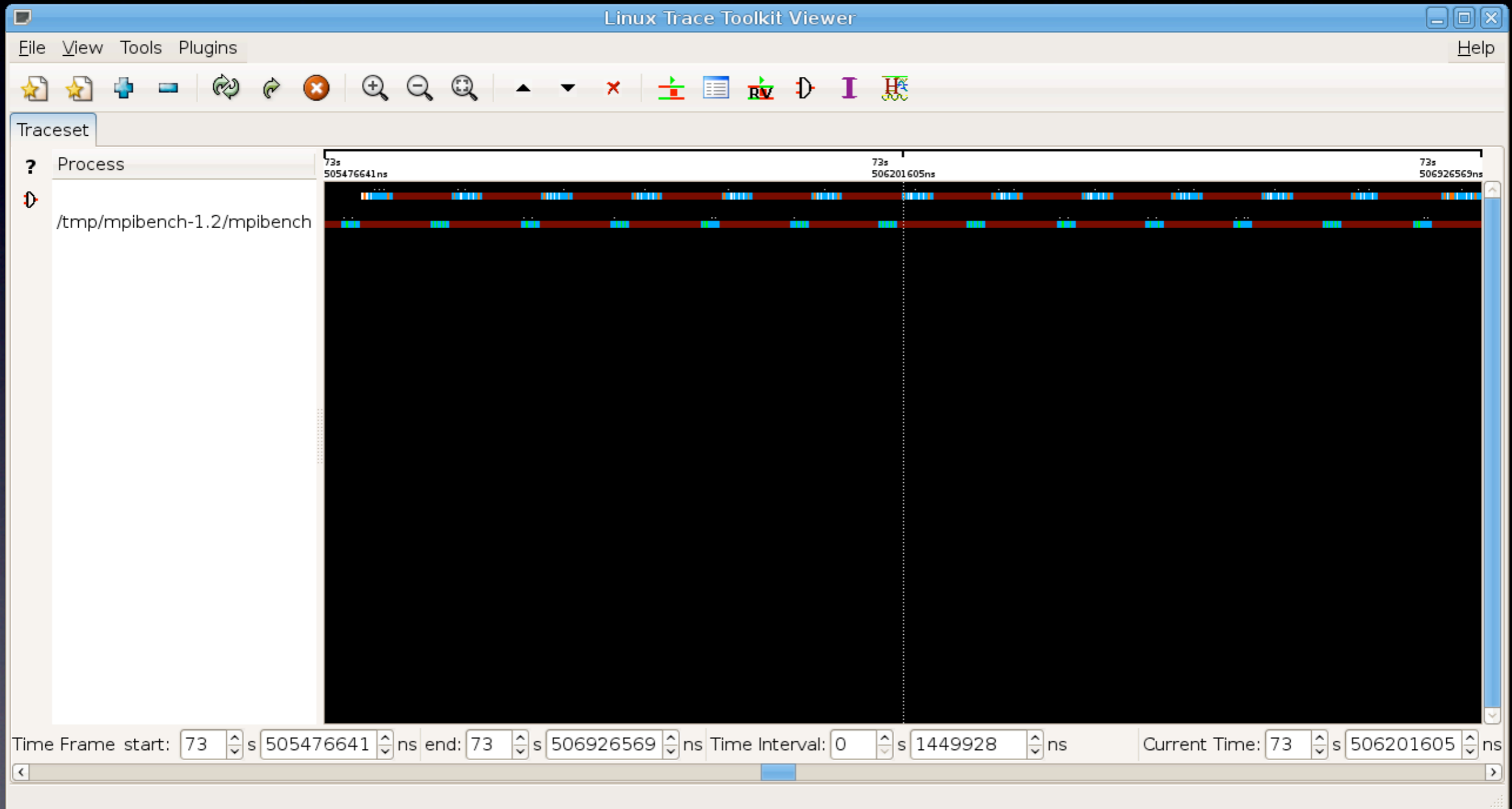
# Results



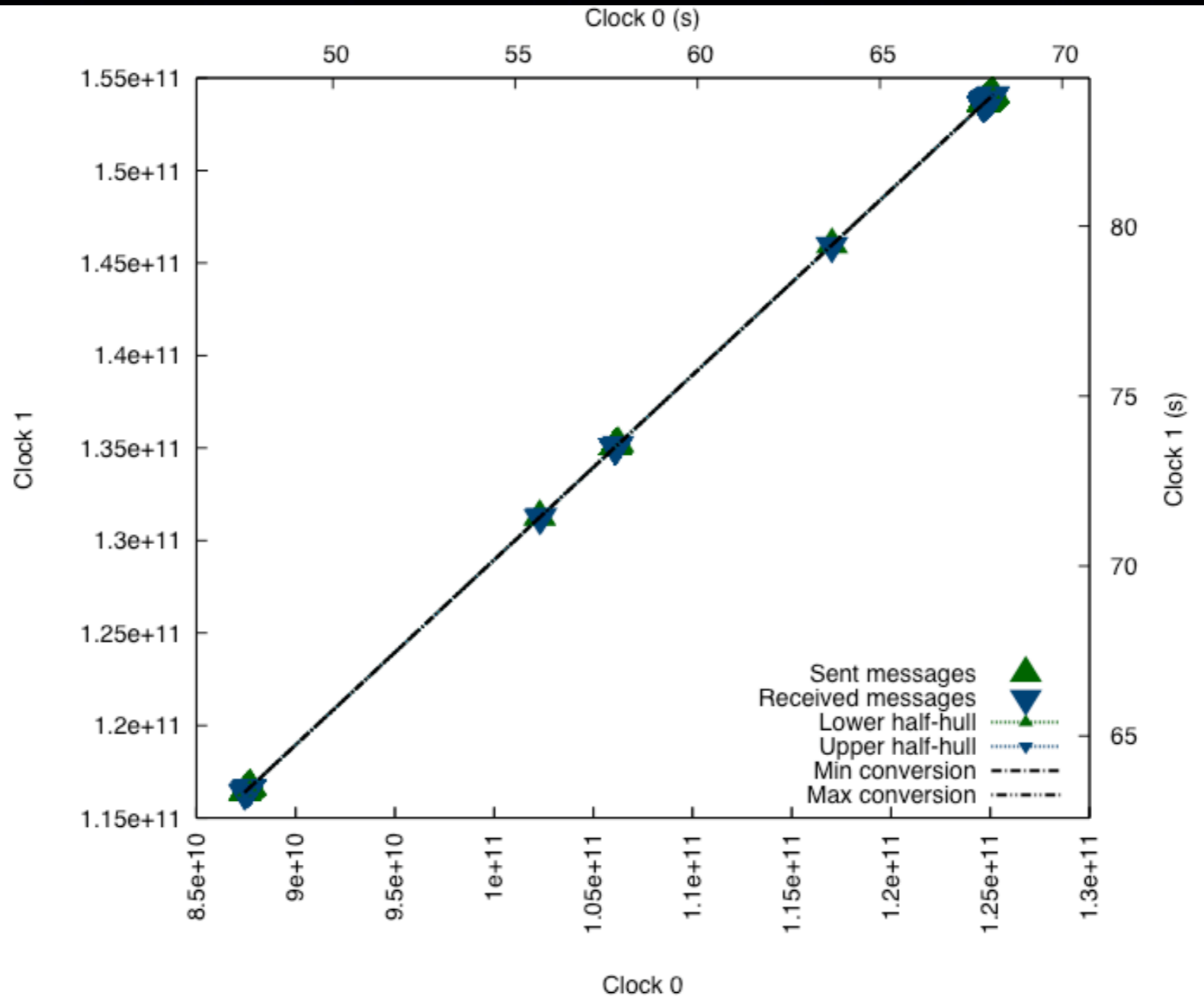
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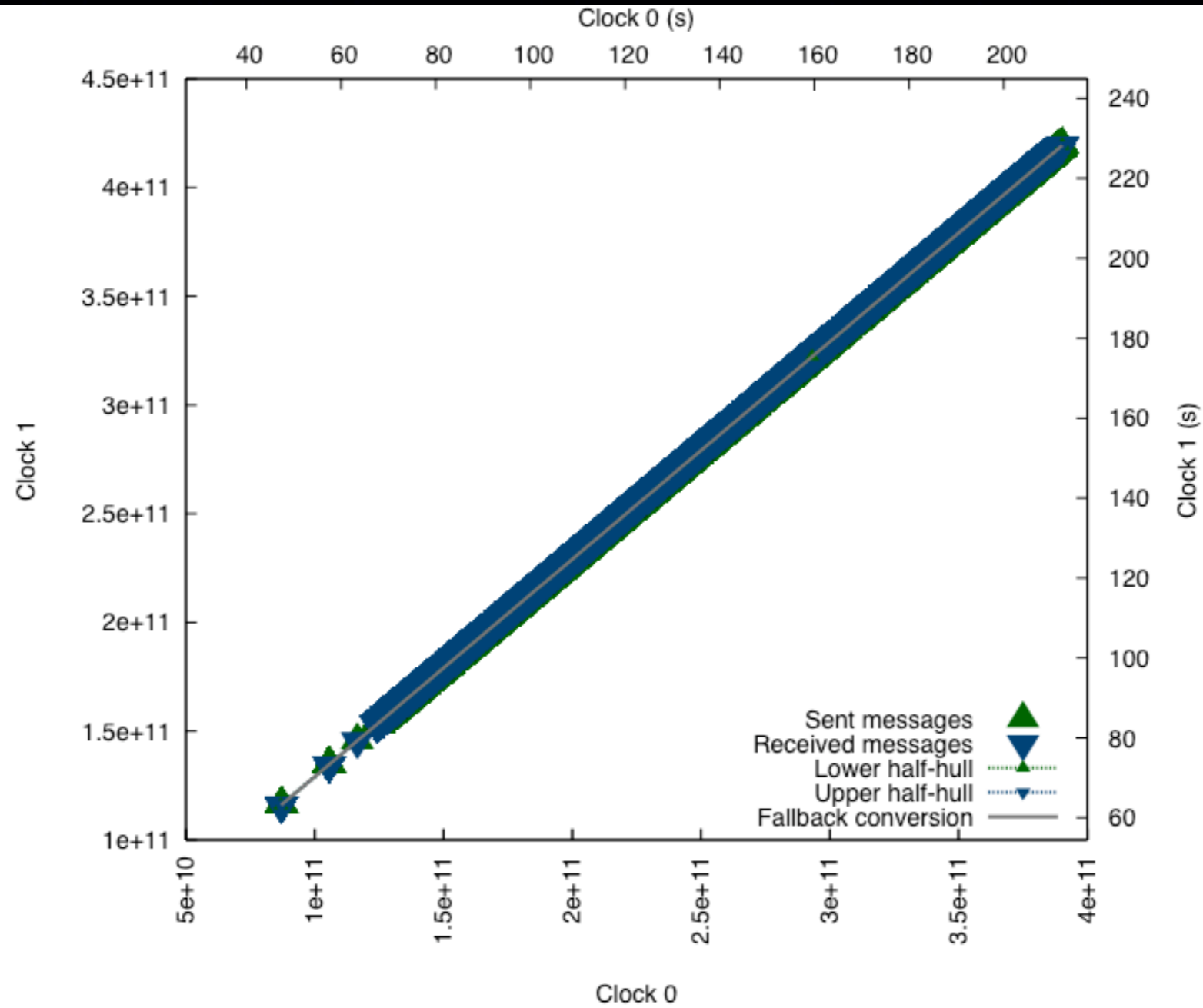
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# Statistics

Linear regression analysis stats:

Individual synchronization factors:

0 - 1 :  $a_0 = 2.89463e+10$   $a_1 = 1 + 3.41805e-05$

Convex hull analysis stats:

Number of points in convex hulls:

0 - 1 : upper half-hull 11 lower half-hull 5

Individual synchronization factors:

0 - 1 :  $a_0 = 2.89464e+10$   $a_1 = 1 + 3.29451e-05$

$a_0$ :  $2.89462e+10$  to  $2.89466e+10$

$a_1$ :  $1 + 3.09463e-05$  to  $+3.4944e-05$

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Convex hull analysis stats:

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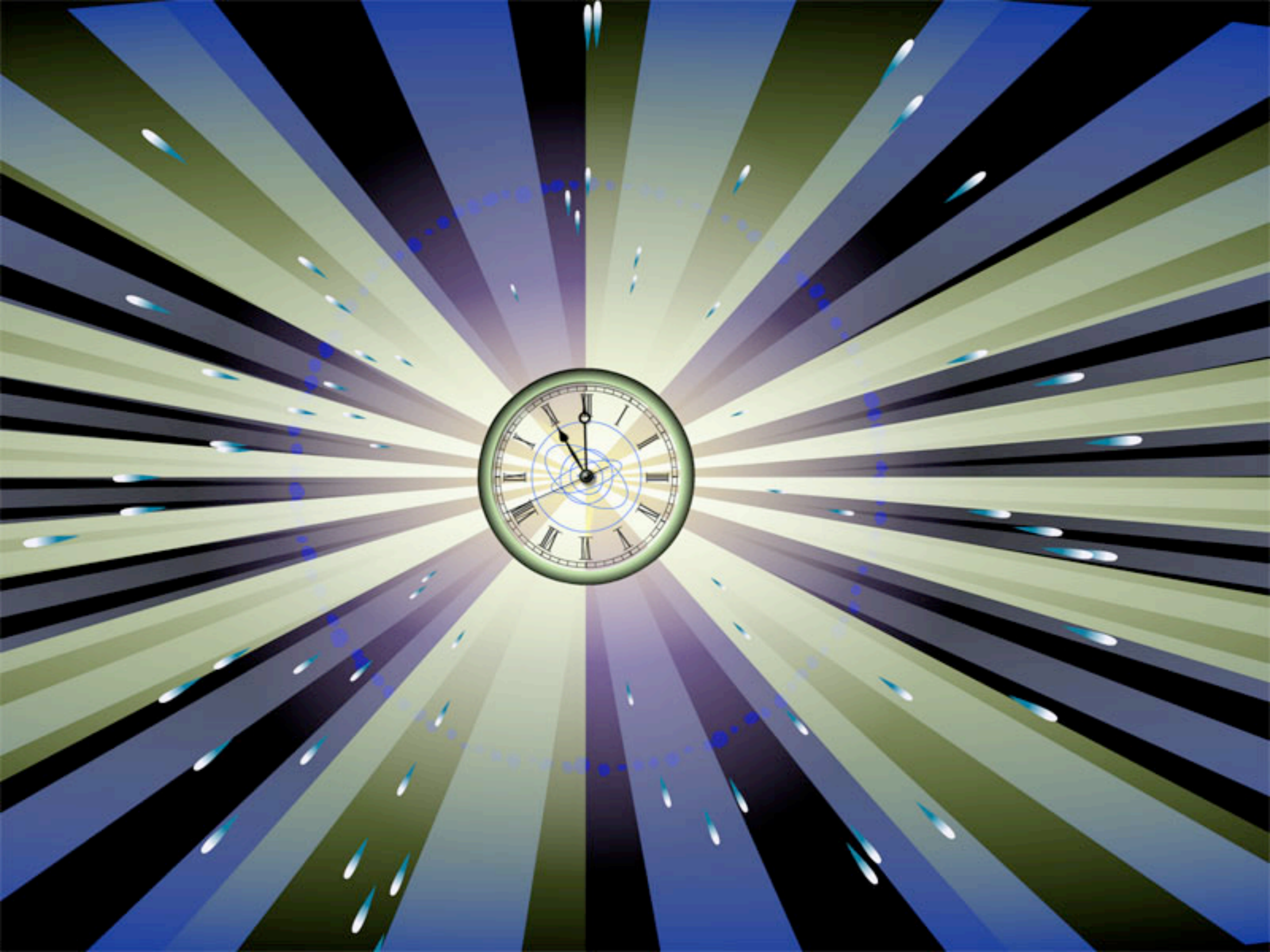
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a0: 2.89462e+10 to 2.89466e+10

a1: 1 +3.09463e-05 to +3.4944e-05







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Multi-level Multi-core Distributed Traces  
Synchronization

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